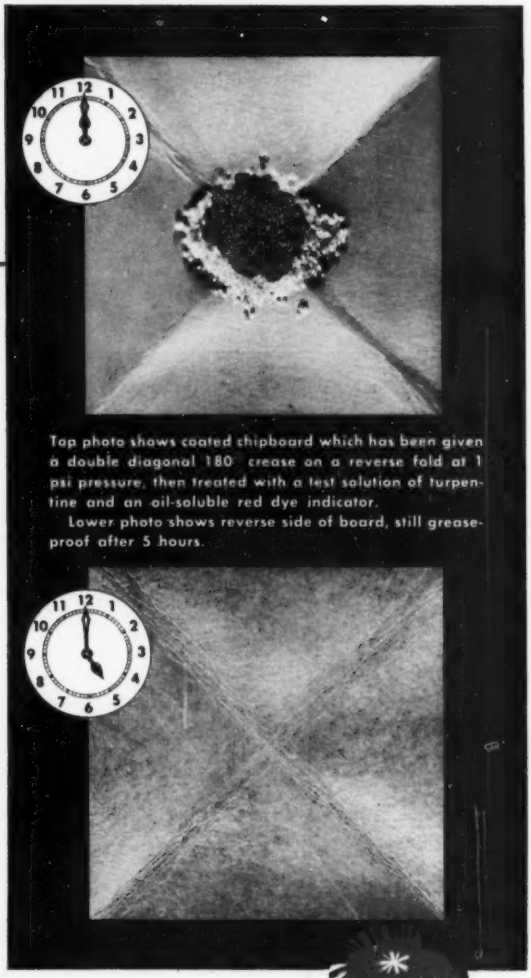
Modern packaging

Nominated for *Packaging's Hall of Fame*™. Story on Page 98

October 1952

still grease proof...



Top photo shows coated chipboard which has been given a double diagonal 180° crease on a reverse fold at 1 psi pressure, then treated with a test solution of turpentine and an oil-soluble red dye indicator.

Lower photo shows reverse side of board, still greaseproof after 5 hours.

COPOLYMER EMULSIONS of Polyvinyl Acetate give *better* greaseproof coatings — *at no extra cost!* Greaseproofness of these coatings exceeds that of rigid government specification JAN-B-121. They *last longer*. You get greater permanence than with presently used materials, better resistance and flexibility. They're cleaner looking.

You also get these advantages in the coating operation:

- **No fire hazard**
- **Equipment is easily cleaned**
- **Uniform viscosity permits easy machining**
- **Standard drying equipment can be used**

APPLICATIONS: Cartons for baked goods — doughnuts, rolls, cakes . . . Machine part wrappings . . . Paper plates . . . Meat packages . . . Greaseproof laminant for foil, glassine . . . Heat seal greaseproof coating — eliminates adhesive cost in making greaseproof pouches, cartons, etc.

For full information, clip and mail the coupon.

5 hours later

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National ADHESIVES

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I'D LIKE TO INCREASE GREASEPROOFNESS

Please send technical data on National's POLYVINYL ACETATE COPOLYMER EMULSIONS MP

Name _____ Title _____

Company _____

Address _____

City _____ Zone _____ State _____

GAIR FOIL CARTONS

create a style trend in smart Packaging!

Gair-Reynolds Foiline Cartons with a full range of true color reproduction on foil, are rapidly creating a new style trend in smartly designed packaging... packages that literally Sell-A-Product on Sight.

These brilliant Foil Cartons, in gold, silver and other scintillating metallic colors are endowed with the notable feature of doubling and tripling sales in competitive markets.

Increase the prestige, sales and profits of your product, with the "Selling Impact" of Gair Multicolor Foil Cartons.

Write for Gair Brochure on Folding Cartons.

GAIR

PAPERBOARD
FOLDING CARTONS
SHIPPING CONTAINERS

ROBERT GAIR COMPANY, INC. • 155 EAST 44TH STREET • NEW YORK • TORONTO

Modern packaging

Vol. 26 No. 2 October 1952

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Volume 25 Index of MODERN PACKAGING is now available. Subscribers may obtain the index, covering the period from September, 1951, through August, 1952, free of charge by writing to the Editorial Department, MODERN PACKAGING, 575 Madison Ave., New York 22, N. Y.

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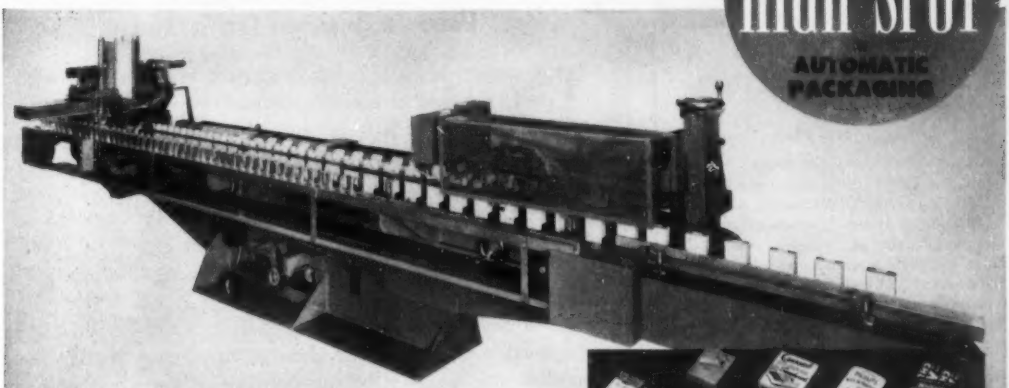
FOR FAST PRODUCTION WITH A MULTIPLE-ITEM LINE . .
OR WHERE CARTON SIZES VARY WIDELY . .

REDINGTON
HIGH SPOT
AUTOMATIC PACKAGING



REDINGTON *Type 9L* VERTICAL CARTONING MACHINE GIVES YOU STRAIGHT-LINE OPERATION

When you must make frequent changes for different items or varying package sizes, the highly flexible REDINGTON Type 9L helps you keep production at profitably high levels. Change-overs are easily made. Versatile 9L handles packages from as short as 2 5/16", all the way up to as long as 8". Here's the simple 9L operation:

> Articles to be cartoned are fed in on machine's intake belt. Machine feeds collapsed carton from magazine, expands it, and closes bottom flap; then carries carton, with open end up, to loading position. Operator manually places article in open carton. Machine automatically closes by tucking top end-flaps.

REDINGTON Type 9L gives you *all* the advantages of both performance-efficiency and long-life construction. A few of its features: *1) Straight-line operation; articles enter at left, complete packages come out at right—no kinks, no loops, no U-turns in your production line. 2) Intake belt for fast, convenient handling of articles. 3) The expertly engineered design details and sturdy construction which put all REDINGTON machines in a class by themselves.*

For regular cartoning of lines with many items or varying carton sizes . . . or for stand-by service on special merchandising combinations, sample packaging, introductory sizes, or other packages impractical for fully automatic handling . . . REDINGTON Type 9L will keep your production up, your costs down. Particularly attractive for low equipment budgets.

A FEW 9L USERS . . .

Bristol-Myers Co. • Chas. Pfizer & Co. Inc. • Lederle Laboratories • Whitehall Pharmacal Co. • Grove Laboratories, Inc. • Certified Extracts • The Norwich Pharmacal Co.

SEND FOR THIS COMPLETE CATALOG

32 illustrated pages of information about the many REDINGTON standard and special machines for AUTOMATIC PACKAGING of everything from Codfish to Razor Blades. Write to the address below . . or to our Eastern office—342 Madison Ave., New York 17.

REDINGTON
AUTOMATIC MACHINES for CARTONING . . WRAPPING SPECIAL PACKAGING
— since 1897 —

F. B. REDINGTON CO., 110-112 S. SANGAMON ST., CHICAGO 7, ILL.

Modern packaging

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●

EXECUTIVE AND EDITORIAL OFFICES: 575 Madison Ave., New York 22; Telephone —Plaza 9-2710.

BRANCH OFFICES. *Chicago*, 101 E. Ontario St., Chicago 11, Ill. (DElaware 7-0060). *Cleveland*, 815 Superior Ave., Cleveland 14, Ohio (SUperior 1-0737). *Los Angeles*, 816 W. Fifth St., Los Angeles 17, Calif. (MUtual 8335). *London, England*, L. H. Dolaro, European Advertising Representative; 10, 11 and 12 Broad Street Ave., Blomfield St., London, E. C. 2, England (London Wall 4231).

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EDITORIAL

Take a lesson from soap

THE PRINCIPLE THAT EVERY CONSUMER PRODUCT should be packaged as if its very life depended upon the package—with no selling help from anybody—has been argued too often in these pages and elsewhere to need any reiteration here. Presumably every packager knows that, with the possible exception of diamond necklaces and mink coats, the day of personal selling in the retail store is gone. Call it self service, self selection or just simplified selling: the principle is the same.

Everybody knows this but, outside of the food industry, too few are doing anything about it. Apparently it takes the hard-rock experience of supermarket selling to drive the point home. That's why we think it's healthy that drugs and cosmetics and hardware and dozens of other non-food commodities are moving into the supermarket to such an extent that, as now pointed out in our lead story this month ("Back to the General Store," p. 85), there is a flurry of activity in many non-food fields to adopt "supermarket design."

We don't share the fears that this trend toward a 20th century version of the general store is going to knock the drug stores and the hardware stores out of business. A package that will stand up and sell itself in the supermarket maelstrom is a better package anywhere. And the whole history of packaging proves that better packaging and wider distribution of any product make more business for everybody.

It's true that the specialist retailers are going to have to adopt more of the supermarkets' cost-cutting methods. And the way to help them is to give them a truly self-selling package.

We don't quite like the term "self selling" because it may imply too much. Advertising must first make the brand known and wanted; the package then capitalizes on this preselling by saying "Here I am!" As clerk selling declines, the burden of preselling by advertising increases. But advertising is nobody's monopoly and as between a half-dozen brands of soap equally well advertised it is the package that speaks loudest and most convincingly that gets the sale. We can all take a lesson from soap.

The Editors

Bud Burris presents a packaging idea

Practically *everybody* knows Bud Burris. He's President of Halter's Pretzels Inc., and one of the smartest merchandisers in the food business. Smart merchandisers and Dobeckmun go hand in hand. So, naturally, Bud worked with us in the creation of this brilliant new line of cellophane packages for OVEN KING pretzels. Do you need a good sales idea for your product? Then get in touch with Dobeckmun today.

The Dobeckmun Company, Cleveland 1, Ohio • Berkeley 2, California • Bennington, Vermont

DO YOU KNOW WHAT "IN-PLANT BOX MAKING" MEANS?

THE Rite-Size BOX MACHINE

This newest and most revolutionary idea in packaging now permits you to make your own boxes right in your plant.

Save on INVENTORY STORAGE SPACE BOX COSTS

Performance records of RITE-SIZE installations in companies across the country prove that now you can save three ways by making cartons right in your own plant.

1. You Save On Inventory

No need now to buy containers in greater-than-wanted-quantities—to "stock-pile" special size and shape cartons against future requirements. The RITE-SIZE Box Machine gives you just the right size container for each packaged item—made on the spot whenever you want it. It saves money on reduced inventory—reduced handling costs—eliminates loss from obsolescence.

2. You Save Storage And Manufacturing Space

Now you can have a complete box-making department in a corner of your plant that requires only 1500 square feet of area. Companies report savings in storage area up to 90% thereby freeing other space for urgent use.

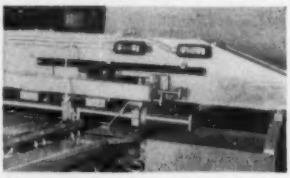
3. You Save On Box Costs

No more costly set-up charges and delays in delivery of the special-size cartons you need. The RITE-SIZE Box Machine *automatically* slots, scores and cuts off to size box blanks from corrugated sheet stock and sets up in 1½ minutes. The machine turns out cartons of almost any style you wish—in thousands of different sizes.

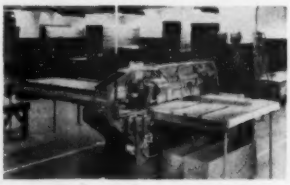
Save Enough Within 2 Years To Pay Entire Cost of Machine

Records show that actual cash savings with the new RITE-SIZE Box Machine are often more than 50% on short runs. Operating on an 8-hour day and turning out 400 box blanks an hour (that's only 75% of capacity), the machine can save enough within *two years* to pay for its entire cost. And it goes right on piling up the same savings for you in year after year of trouble-free operation. Get the free folder now giving complete information on operating features and costs of the new RITE-SIZE Box Machine. Write or wire Colt's Manufacturing Company, Packaging Machinery Division, Hartford 15, Connecticut.

RITE-SIZE Box Machine is fully automatic and requires no special knowledge to run. Only one operator is necessary. Machine turns out 600 box blanks per hour.



Dimensional controls are simple to operate. Set-up time for any size box is less than 1½ minutes. Push button and scale control regulates length, width and depth and maintains accuracy to within 1/16 inch on any panel.



Mill run corrugated sheets up to 65" wide are fed from right. Accurate box blanks, cut to size and ready for folding, taping or stitching are delivered over run-off table at left.

ALSO AVAILABLE "RITE SPOT" PRINTER ATTACHMENT "RITE SIZE" 96" SLITTER SCORER

On display at INDUSTRIAL PACKAGING & MATERIALS HANDLING EXPOSITION CHICAGO — OCT. 14-16

RITE-SIZE Box Machine
manufactured by

COLT

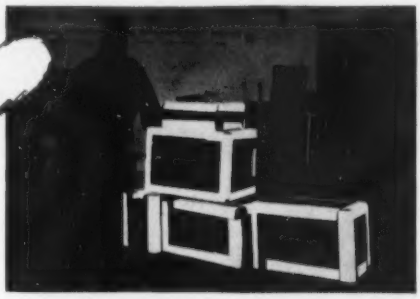
Makers of the World's Finest Handguns

News about

B. F. Goodrich Chemical Company *raw materials*

Cardboard motor oil container that petroleum products can't harm!

Fiber drum—surface protected inside or out!



The tape that "sees" at night!

Hand it to GEON

for these 3 packaging success stories!

THESE pictures show you just a few of the wide range of packaging applications for Geon materials. One is a luminescent tape that glows at night, renews itself during the day. Another—a cardboard container developed by a French manufacturer for motor oil and other petroleum products; it's grease-and-water-proof... replaces critical tin-plate. The third, a fiber drum that can be coated inside or outside to provide a washable, abrasion-resistant surface, and good moisture vapor transmission protection.

Check the many advantages that Geon materials offer for packaging applications—resistance to heat, cold, weather, water and wear—gas, oil and many chemicals. Geon materials also provide excellent moisture vapor resistance, good anchorage, decorative appeal, and allow heat sealability.

Geon materials—resins or latices—may help you improve your packaging materials or methods, or develop new ones. Write for technical advice. Ask for your free copy of the helpful booklet, "Packaging Problems Solved With Geon". Please address Dept. GL-10, B. F. Goodrich Chemical Company, Rose Building, Cleveland 15, Ohio. Cable address: Goodchemco.

GEON RESINS • GOOD-RITE PLASTICIZERS . . . the ideal team to make products easier, better and more saleable.

GEON polyvinyl materials • HYCAR American rubber • GOOD-RITE chemicals and plasticizers • HARMON organic colors

"FRESH-FROM-THE-TREE" FLAVOR

Pour yourself a glass of cold Wayne County Pure Natural Apple Juice. M-m-m that fragrant aroma brings to mind big . . . red . . . ripe . . . juicy apples. That first taste says that here's a drink you're going to make a habit of asking for often.*

and this combination helps insure the original taste and quality

This is a Crown Screw Cap and a solid rubber disc liner. It's a combination that has made a big impression on packers of various juices and syrups manufactured from fruits.

The solid rubber disc liner is firmly fixed within the Crown Screw Cap so that it will always adhere to the metal shell during handling and capping. And this closure provides an hermetic seal that is sure protection for pasteurized products.

Before you order closures for this type of product again . . . send for samples of the Crown Screw Cap with solid rubber disc liner. You'll be quick to see the advantages it offers you. Crown Cork & Seal Company, Baltimore 3, Md. *World's Largest Makers of Metal Closures.*

*** WAYNE COUNTY APPLE JUICE** is a product of The Wayne County Produce Company, Greenpoint, Long Island, N. Y., with plants in Wayne County, N. Y.

CROWN CLOSURES

Approved by Millions of Housewives

ANOTHER QUALITY PACKAGING PRODUCT FROM AMERICA'S OLDEST BAG MAKER

CHASE POLYTEX BAGS

Chase POLYTEX bags, made of polyethylene, are the popular package for many consumer and industrial products.

They're durable . . . economical . . . brilliantly printed with special inks that will not rub off. Fabricated in all sizes and gauges. Both special and stock brands for produce and round bottom poultry bags. Check today on Chase POLYTEX bags and liners. Your Chase salesman will be glad to show samples and provide complete packing and closing information.

CHASE CARPET WRAP
Tough, economical, moistureproof. Applies quickly and easily. Beautifully printed. Helps eliminate telescoping. Protects shipments weighing up to half a ton and measuring 15 feet in length. A Chase FIRST in Packaging.

CHASE BALE CUPS
These burlap boxes telescope over all types of goods. They're moistureproof, pilferproof, and ideal for export shipment. Save insurance and labor costs. Pioneered by Chase.

CHASE BARREL COVERS
Constructed of neoprene-treated kraft—combines durability with great resistance to wet-tears. Also available in asphalt laminated burlap, with sewn-in drawcords. Another Chase FIRST.

Write today for your free copy of booklet on packaging, "Worth Looking Into."

for Better Bags...Better Buy Chase!

CHASE BAG CO. GENERAL SALES OFFICES: DEPT. MP, 309 W. JACKSON BLVD., CHICAGO 6, ILL.

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S-15: 22, 24, 28, 30, 33mm and larger metal or molded caps

Calmar Plastic Sprayers

Guaranteed satisfaction in luxury colors at low cost for glass cleaners, residual type insecticides, space deodorants, medicaments, moth sprays, etc. Red, blue, green, yellow, ivory head and collar combinations.

S-20: 20mm caps only

S-10: 18mm and smaller caps only

Write for Illustrated Catalog-Price List

Your fluid products look better, sell better with colorful Calmar closures...and the cost is surprisingly economical. Write for the complete Calmar Catalog-Price List. It may suggest profitable packaging ideas.

Please write: Department M

CALMAR COMPANY

6425 McKinley Ave., Los Angeles 1, California

Calmar

No. 1

No. 2

No. 5

Calmar Plastic Dispensers

These low cost attractive dispensers are featured by many leading manufacturers of hand lotions, liquid soaps, baby oils, beauty preparations, and household products. Calmar dispensers are equipped with stainless steel balls and springs. Calmar dispensers will never corrode when used with dispensable liquids not containing aromatic hydrocarbons, ketones or esters. All of the smart ivory head styles illustrated are assembled to jet black molded caps from 18mm to 33mm.

Calmar Mohair Applicator

Designed primarily for cleaning fluids, this functional closure is available in 28mm cap size with red enamel metal cover.

Calmar Atomizers

Save money yet actually improve your package with refreshingly new pastel colors. Compare Calmar's non-plugging, fine mist atomization with any metal atomizer. You will be amazed! The snow white polyethelyne mounting will never discolor or corrode.

Complete assembly includes matching color urea caps and rubber bulbs in your choice of Dawn Pink, Laguna Green, Light Blue and Off White. Immediate shipment of stock colors in urea cap sizes: 15-415, 18-400, 18-410, 20-410, 22-410.

Special color caps and bulbs also available. Can be mounted to your own caps.

Valveless rubber bulbs for colognes, anti-perspirants, hair preparations and products requiring the finest atomization.

757 (small)

784 (large)

Valve-equipped bulbs for room deodorants, hair dressings, medicaments, disinfectants and similar products.

766 (small)

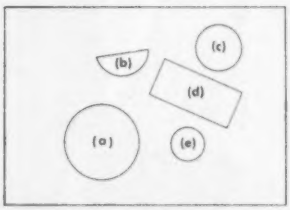
767 (large)

CALMAR COMPANY • 6425 McKINLEY AVENUE • LOS ANGELES 1, CALIFORNIA

Write for samples, specifying cap size and inside bottle height of your package

BATES SELLS GOOD GROOMING

in TRI-STATE *Rigid Plastic Boxes*



BATES uses our Stock Boxes

(a) – No. 175 – Diam.: 6" x 1½" deep
(b) – No. 54 – Half Round: 4⅜" x 1" deep
(c) – No. 52 – Diam.: 4¾" x ⅝" deep
(d) – No. 82 – 6⅞" x 3⅛" x 1⅝"
(e) – No. 32 – Diam.: 2¾" x ⅝" deep

For their gay and attractive manicure sets, C. J. Bates & Son, Chester, Conn., choose plastic packaging that provides dust-free protection, eliminates expensive labelling and sealing, and gives the consumer a perfect, practical bonus.

The five transparent Rigid Plastic Boxes shown here — each selected by Bates as a sales-plus for their products — offer a fine sample of the variety and versatility of our stock sizes. And Tri-State's injection molding techniques also make possible an economical and "custom made" answer to any of your packaging problems.

For greater product pride, utility, and point-of-sale appeal: consult Tri-State — catering to the packaging needs of great companies everywhere.

The best Rigid Plastic Boxes are Injection Molded by

TRI-STATE PLASTIC MOLDING CO., Inc.
HENDERSON 6, KENTUCKY

NEW YORK: 12 E. 41st St., MUrray Hill 3-6572 **CHICAGO:** 176 W. Adams St., FRanklin 2-7292 **DETROIT:** 4697 Lakewood, VAlley 2-9761

"Peppermint for President!"

"Peppermint for President!"

"Peppermint for President!"

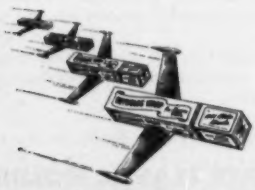
"Peppermint for President!"

Beech-Nut Peppermint... the flavor that millions favor! To protect that flavor in its full chewable freshness, the Beech-Nut Packing Company has long used the positive moisture protection of aluminum foil for its 5-stick pack... a foil-on-paper wrap plus a reverse printed transparent overwrap. And Reynolds has long been a major foil supplier to Beech-Nut.

This association has resulted in another packaging development important to the chewing gum field. It is Reynolds high gloss printed foil overwrap.

This single wax-sealed aluminum foil overwrap supplants the plain foil used for banding, and eliminates the need for the reverse printed transparent overwrap. It is competitive in price. It provides sparkling identification of the product. It maintains throughout shelf life the ever-new, ever-fresh appearance which bespeaks the freshness of the contents. And, in addition, the single wrap eleminates one station on the packaging machine!

This is but one example of how Reynolds, pioneers in foil packaging, works together with manufacturers to solve problems efficiently, economically and with sales-boosting effect. Find out what Reynolds Aluminum Foil can do for your product. Consult your nearest Reynolds Aluminum Sales Office or write to Reynolds Metals Company, General Sales Office, Louisville 1, Ky.



REYNOLDS ALUMINUM

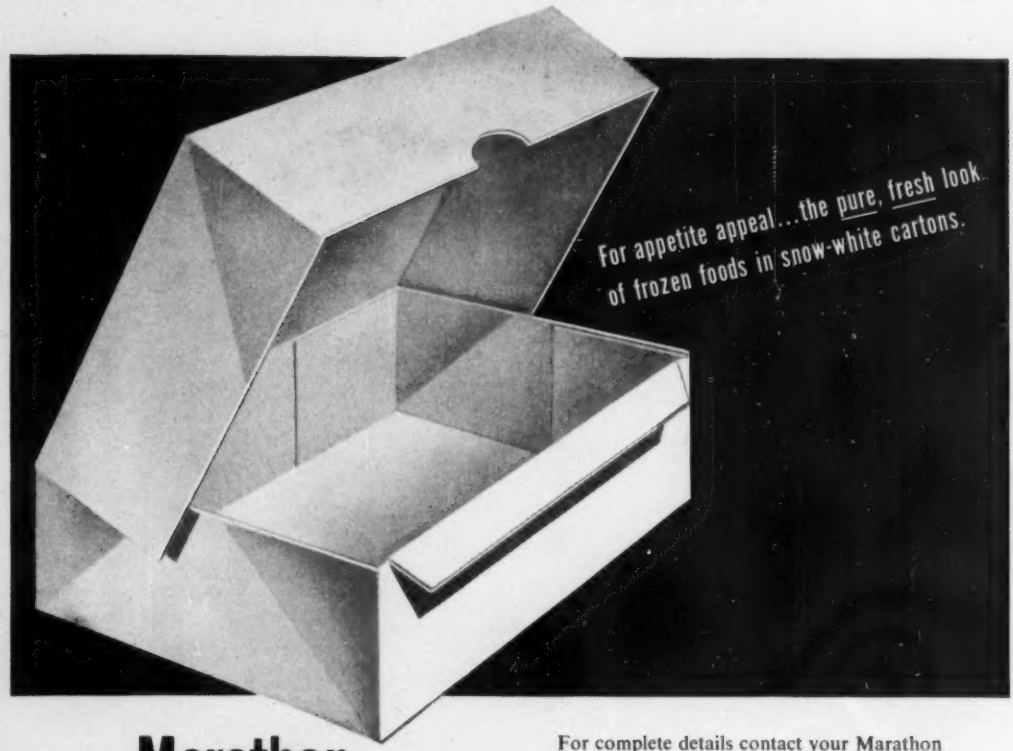
Pioneers of Progress in Aluminum Foil Packaging

BEECH-NUT GUM
BEECH-NUT GUM
PEPPERMINT FLAVOR
BEECH-NUT BRAND
ALWAYS REFRESHING
BEECH-NUT GUM
BEECH-NUT GUM
PEPPERMINT FLAVOR
BEECH-NUT BRAND
ALWAYS REFRESHING

Salesman in white!

There's nothing like a snowy white carton to let the housewife know that your foods are top quality. That's why Marathon's famous Impervo cartons—made of pure white Q-board—give such a vital sales boost to your frozen food products.

Impervo cartons are white . . . pure white. Double-waxed inside and out—to make them moisture-proof, stain-proof, and keep foods from freezing to the carton. Impervo's extra strength and rigidity prevent unsightly softening and sagging, insure trouble-free packing and overwrapping. Available in both consumer and institutional sizes.



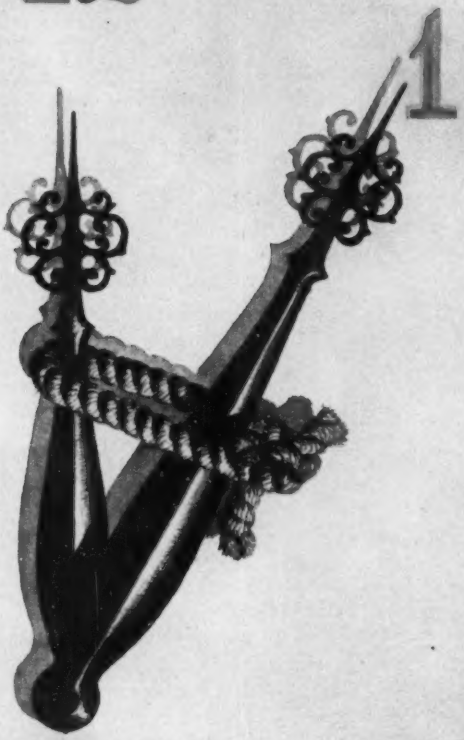
Marathon Impervo Carton

(made of Q-Board)

For complete details contact your Marathon representative, or write *Marathon Corporation, Menasha, Wisconsin.*

Marathon Corporation

packaging that sells food



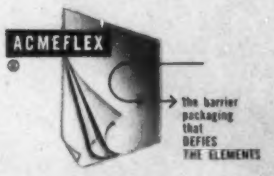
TIME STANDS STILL INSIDE YOUR PACKAGE...

Does every tick of the clock rob *your* product of a fractional share of its original perfection?

Such loss need not occur. Acmeflex—the new wonder packaging material — virtually makes time stand still inside your package. Delivers your product to its final destination in the same condition it left your hands days, weeks, months before.

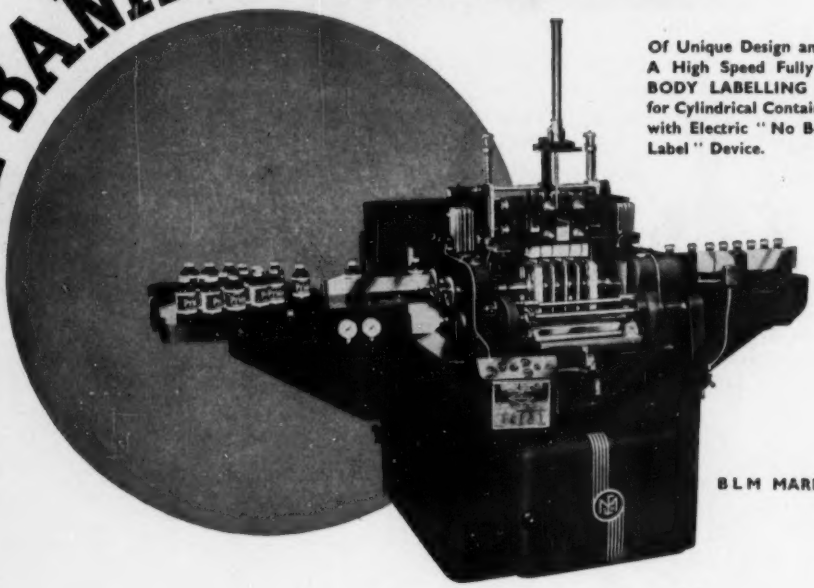
Acmeflex is a unique barrier . . . provides the ultimate in protection . . . possesses the perfect degree of flexibility . . . can be engineered to your specific requirements. For high-speed automatic packaging, Acmeflex is unsurpassed.

Your request for information and samples invited.



ACME BACKING CORPORATION, Brooklyn 6, New York

THE 'BANKS' LABELLER



Of Unique Design and Principle. A High Speed Fully Automatic BODY LABELLING MACHINE for Cylindrical Containers. Fitted with Electric "No Bottle — No Label" Device.

B L M MARK 3.

Precision labelling from 2,400—10,200 units per hour using one label stack only.

The "Banks" Labeller is simple to operate, occupies very little space, and positions the labels positively, accurately, and without any trace of surplus gum beyond the edges of the label, irrespective of the label shape or size.

Change from one size of container to another is obtained in a matter of seconds. Cleaning down takes only a few minutes.

Manufactured in 6 models suitable for use in Breweries, Mineral Water, Food, Cosmetic and Chemical Factories, etc.

Each model will label all round or part, up to the label width capacity of the machine, from ½" up to 12" wide.

B.L.M. Mark 1 will apply a label 3" wide x 4" deep.
B.L.M. Mark 2 will apply a label 4" wide x 6" deep.
B.L.M. Mark 3 will apply a label 12" wide x 6" deep.
All round or back and front or series labels within this area.

Please write for descriptive literature

Each of these models will accept diameters from 1¼" to 4½".

Models B.L.M. Mark 1.S or 2.S will accept diameters down to ⅝".

Over 1,000 machines are at work or on order for THIRTY Countries and 180 Towns and Cities in Great Britain.

***Manufactured* by Morgan Fairest Ltd. Sheffield. England**

fmc

STOKES & SMITH Co

PACKAGING MACHINERY **PAPER BOX MACHINERY**

Frankfort • Philadelphia 24, U.S.A.

Subsidiary of Food Machinery and Chemical Corporation

Mills Presents Another "First"

Tubes

Naturally, the first large size collapsible Polyethylene tubes made in America are a Mills product. We made our reputation in plastics doing things "first" or by doing the jobs others said were either "too tough" or "impossible."

These tubes, which were custom made for the Sue Ann Food Products, Chicago, are as distinctive an innovation in packaging as [redacted] bottles were when they first appeared. They are dent proof and durable, attractive and light, and offer functional advantages.

Let us give you full information on [redacted] TUBES. We'll gladly show what this remarkable new method of packaging can do for your products. A request on your letterhead will bring service without obligation.

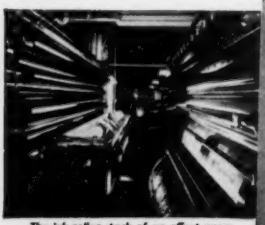
Manufactured under Patent Nos. 2,515,093-2,557,930-2,579,199
Other patents pending

[redacted] & MILLS CORPORATION
2930 NORTH ASHLAND AVENUE • CHICAGO 13, ILLINOIS

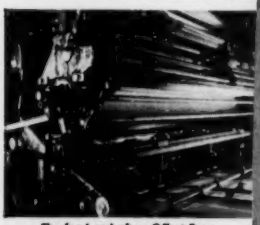
Sales agents for the United States
W. BRAUN CO., CHICAGO, 300 N. Canal St.
DETROIT, 139 W. Maple, Birmingham, Mich.
NEW YORK, 216 [redacted] Ave. • ST. PAUL, 2109 Village Lane

T. M. Reg.

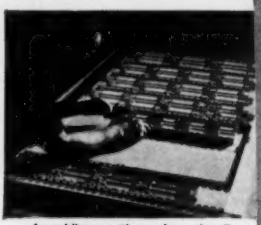
THE CARTON BUYER *May Not Know...*



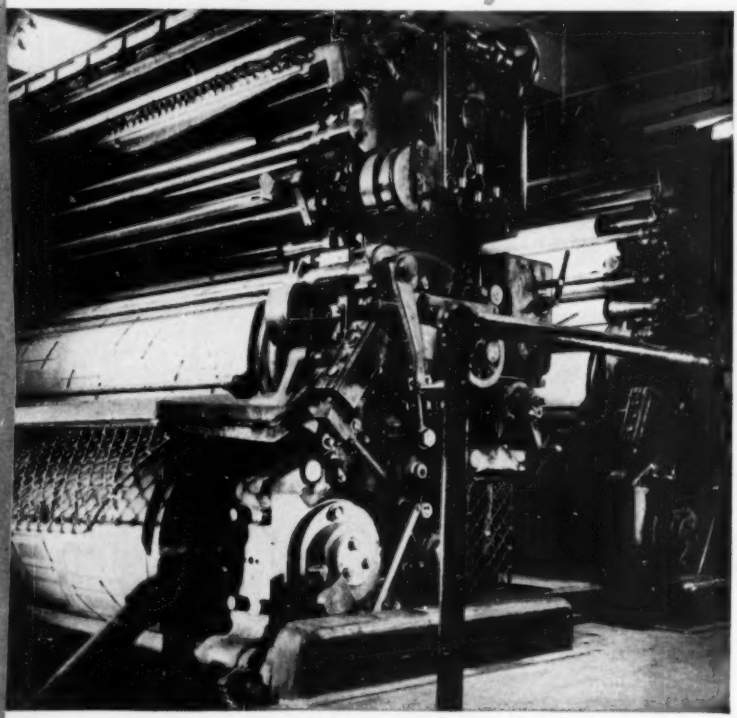
The ink-roller stack of an offset press.



The feed end of an Offset Press.



Assembling a cutting and creasing die.



. . . that Ace Carton Corporation prints both by Letterpress and by Offset Lithography. We have learned that in using either process we are in a position to serve our customers in *wider* range—and we "key" our work to the most advisable means to produce highest possible quality workmanship.

ACE
Packaging that ATTRACTS *is the Packaging that* SELLS

ACE CARTON CORPORATION

5800 WEST 51st STREET • CHICAGO 38, ILLINOIS

Phones: POrtsmouth 7-1111

CHECK THESE ADVANTAGES

Reasons Why You Get Better Paper Coatings and Greater Satisfaction with PLIOLITE NR

WHETHER you convert pulp to papers, papers to packages or package finished products, PLIOLITE NR is your answer to securing the finest in coated paper. For proof, check all these advantages. Compare them point by point with the coating you're using now:

EXCELLENT RESISTANCE TO WVT—compared with other well-known coatings

GOOD CREASE RESISTANCE—even under multiple creasings

GOOD ANCHORAGE—coatings will not strip

GOOD HEAT SEALS—in the range from 275° to 300° F.

HIGH GLOSS—freedom from blocking and good slip

LOW AIR PERMEABILITY—excellent barrier to air and CO_2 diffusion

SIMPLE FORMULATION—needs no extensive modification

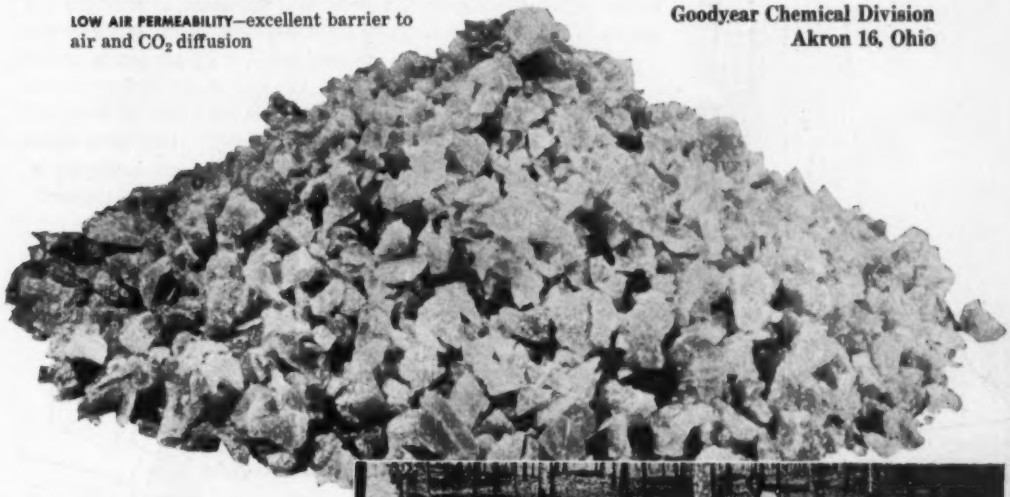
ECONOMICAL—low density means use of fewer pounds per ream

EXCELLENT STABILITY—maintained over long periods

USES SINGLE SOLVENT—simplifies manufacture and solvent recovery

PLIOLITE NR is made from the highest quality, low-protein-content natural rubber—prepared to insure the finest combination of characteristics available in any coating material today. Ask for full details by writing:

Goodyear Chemical Division
Akron 16, Ohio



Resin, prepared by milling, oxidizing, remilling and granulating the finest natural rubber which has been cyclized, gives coatings with outstanding properties. Inset *shows baled natural rubber as shipped from plantations.*

CHEMICAL GOODYEAR DIVISION

Chemigum, Pliobond, Pliolite, Pliovic—T.M.'s
The Goodyear Tire & Rubber Company, Akron, Ohio

Use Proved Products • CHEMIGUM • PLIOBOND • PLIOLITE • PLIOVIC • WING-CHEMICALS — The Finest Chemicals for Industry

VENESTA
means
Top Quality
in ALUMINIUM FOIL
To the manufacture of packaging foil of every kind, plain or printed, coated or laminated, Venesta Ltd. bring the knowledge that comes from long experience. Venesta were already making foil for packaging long before its unique protective properties were widely recognised. To-day their rolling plant is amongst the largest and best-equipped in the world. In technical skill, in mechanical efficiency, in the selection of raw materials, and in their rigorous system of laboratory control, Venesta have the means to offer you top quality in aluminium foil for every packaging requirement. Whatever you need in foil, it will pay you to consult Venesta Ltd. and let them put you in touch with the nearest of their many agents in all parts of the world.
TOBACCO
A PRODUCT OF THE PACKAGING DIVISION

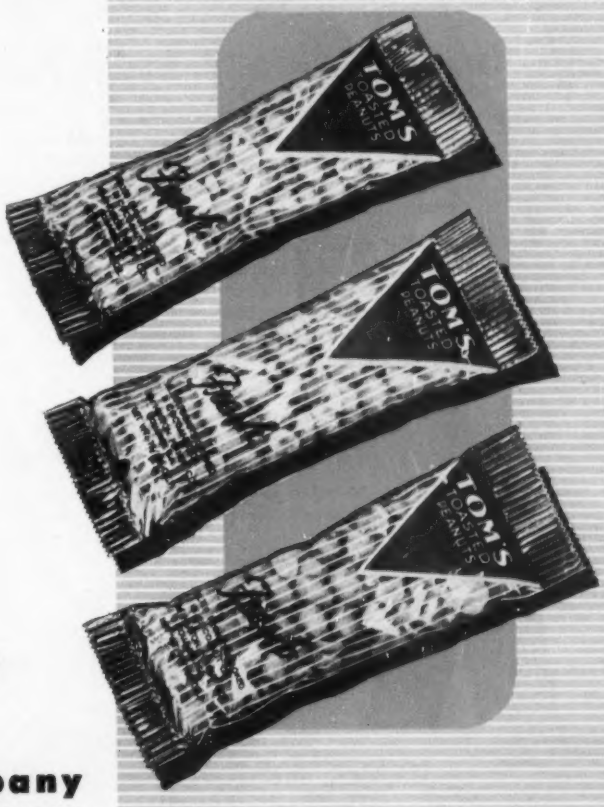
VENESTA LTD., Vintry House, Queen Street Place, London, E.C.4, England. *Cables: Venesta, London*
T.A. 4536

This is the "Standard" for Spectacle

October Saturday afternoons traditionally find up to 80,000 individuals cramming into a single staduim to watch their gridiron favorites in action.

This is the "Standard" for Package Printing

And what football crowd could pass up bags of tasty peanuts—toasted to perfection and colorfully packaged in Standard-printed cellophane.



COLOR-CRAFT

Standard
printing company
PRINTERS OF CELLOPHANE, ACETATE and GLASSINE SINCE 1936
COLUMBUS, GEORGIA
A SUBSIDIARY OF SHELLMAR PRODUCTS CORPORATION

OVP

Powerful Self-Selling Oneida Packages Move Goods!

OVP—Oneida Versatile Packaging—means tailoring your package to the *specific selling requirements of your product*, giving it the power to move off modern self-service counters in volume.

Many of America's fastest-selling packages have been produced by Oneida. For 25 years Oneida's top-notch creative artists and merchandisers have been examining *all kinds* of packages and suggesting changes to step up sales.

Oneida fabricates from most every type of film and paper; producing printed or unprinted rolls and sheets; flat, square, automatic, satchel-bottom, envelope and window-style bags; featuring printing processes such as aniline, rotogravure and oil.

Whatever *your* packaging problem, take it to Oneida for the most profitable solution. Four plants throughout the U.S. are at your service. Contact the plant or office nearest you today!

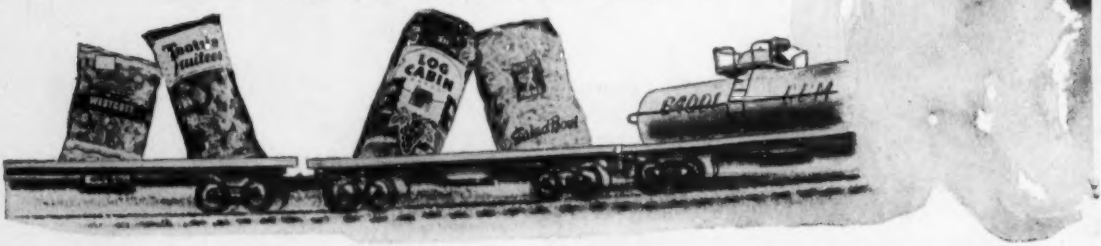
OVP

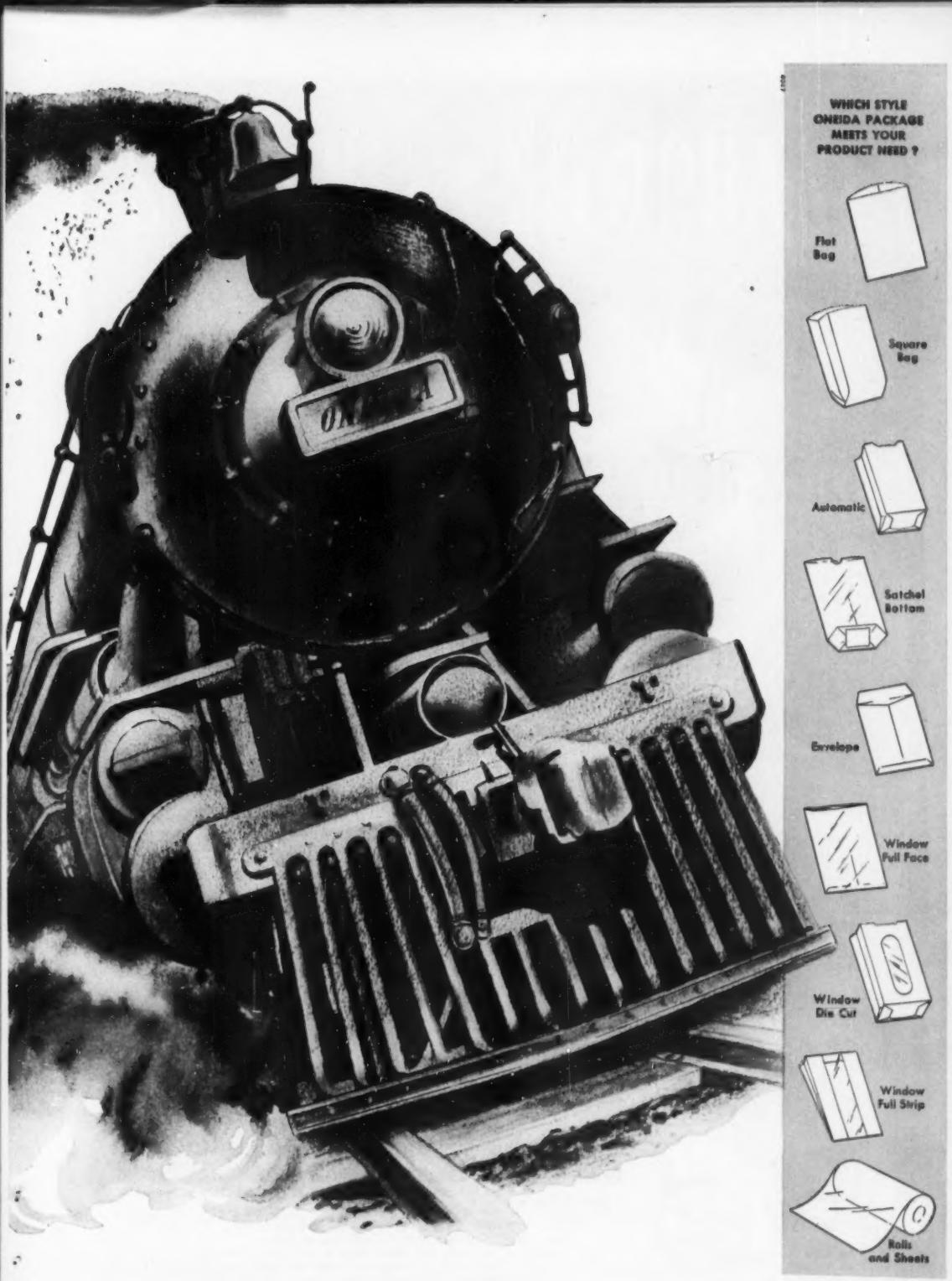
ONEIDA paper products inc.

10 Clifton Boulevard, Clifton, New Jersey

3629 East First Street, Fort Worth, Texas • 8119 Beach Street, Los Angeles, Calif.

● Converters and Color Printers of Bags, Envelopes, Sheets and Rolls from: Glassine, Cellophane, Pliofilm, Parchment, Polyethylene, Sulphite, Foil, Acetate, Kraft, Waxed, Coated and Laminated Grades . . . in Flat, Square, Automatic, Window, Satchel-Bottom, Duplex, Embossed and Heat-Lok Styles.




WHICH STYLE
ONEIDA PACKAGE
MEETS YOUR
PRODUCT NEED ?
Flat
Bag
Square
Bag
Automatic
Satchel
Bottom
Envelope
Window
Full Face
Window
Die Cut
Window
Full Strip
Rolls
and Sheets

(non-flowing compounds)

(medium viscosity creams)

Look at the range of products filled *on one Arenco filler*

(water-thin suspensions)

Products which are so tough that they need a healthy shove to put them into tubes are handled with the same ease as free-flowing liquids by the versatile Arenco Filler.

The Arenco is fast and accurate. It's easy to keep sterile. And it fills an extreme range of containers, too—from tiny 1 cc vials to giant 250 cc (8¾ ounce) collapsible tubes. With minor adjustments an Arenco will fill tubes, jars, cartridges and vials.

Sterility Only stainless steel or resistant metal contacts the product being filled. All of these parts—including the stainless steel single cylinder pump—are easily and quickly demountable for cleaning and sterilization.

Changeovers Size adjustments and material changeovers take only minutes—not hours. And the Arenco will fill most products at speeds from 40 to 55 containers per minute.

Accuracy Even when the smallest quantities are being filled, the Arenco maintains the high degree of accuracy for which it is world famous. Recent tests on filling 1 cc ampoules show accuracy to ± 1%. "Give-away" on larger fills is minimum.

Service The same quarter century old organization which has serviced and is servicing 2,000 other Arenco machines of all types in every part of the country is available to service your Arenco filler. Competent mechanics and complete stocks of spare parts are always on hand. The nearest Arenco representative can supply full details. Contact him now.

Hopper or filling head to fit product. No container, no fill. Automatic cleaning and cap tightening for tubes.

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INCORPORATED
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This tough, durable, completely transparent wrap is engineered to meet a wide range of packaging needs in the confectionery field. It permits easy, low cost, high speed application, heat seals quickly and strongly, can be imprinted in bright, lustrous colors, and because it gives you more for your packaging dollar, is economical to use.

Our Market Development Department will be glad to work with you in determining how your present supply can be utilized more effectively—either through improved package design or the use of a different type or gauge.

SYLVANIA DIVISION AMERICAN VISCOSE CORPORATION

SYLVANIA CELLOPHANE

General Sales Office:
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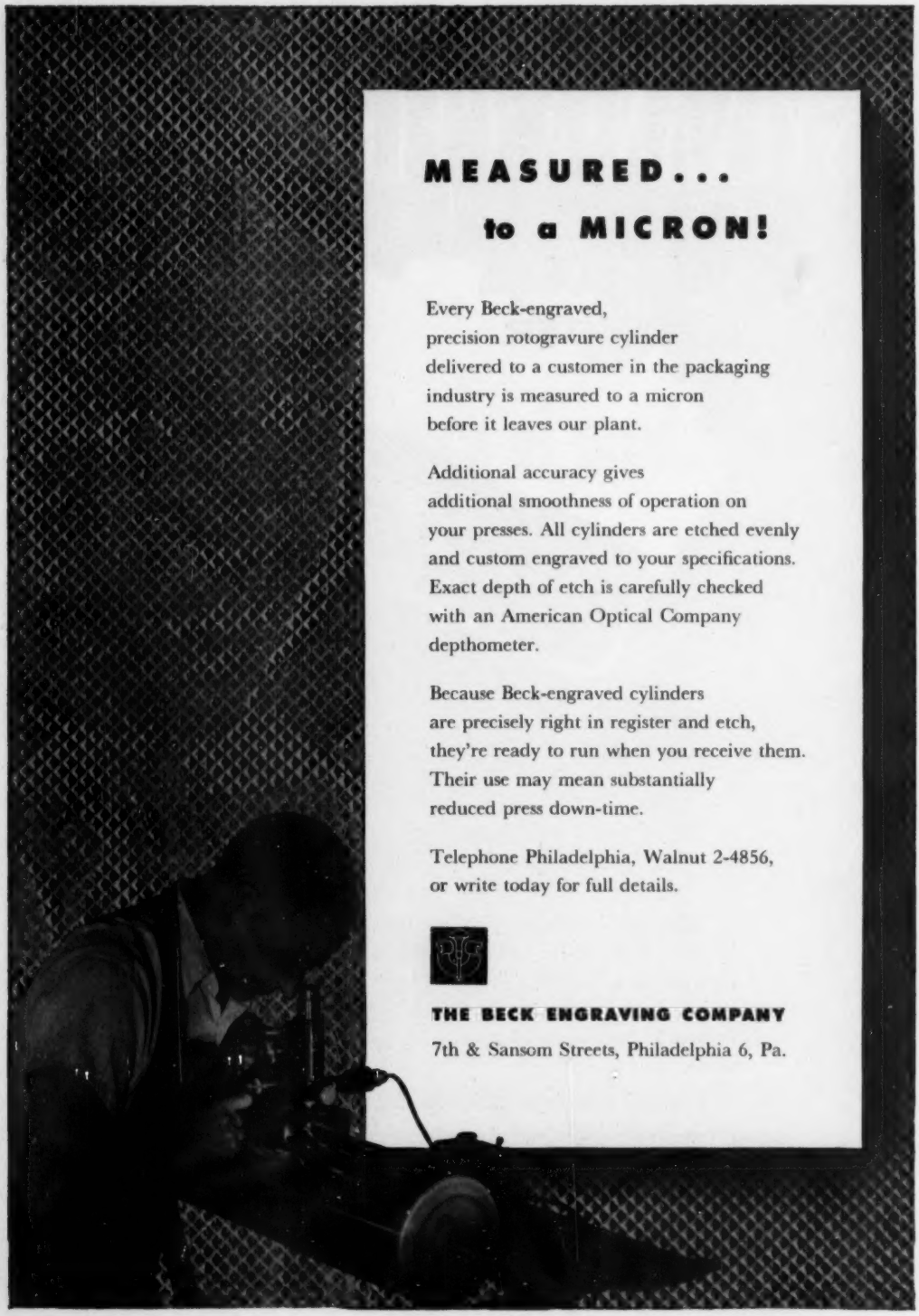
MEASURED...
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Every Beck-engraved, precision rotogravure cylinder delivered to a customer in the packaging industry is measured to a micron before it leaves our plant.
Additional accuracy gives additional smoothness of operation on your presses. All cylinders are etched evenly and custom engraved to your specifications. Exact depth of etch is carefully checked with an American Optical Company depthometer.
Because Beck-engraved cylinders are precisely right in register and etch, they're ready to run when you receive them. Their use may mean substantially reduced press down-time.
Telephone Philadelphia, Walnut 2-4856, or write today for full details.
THE BECK ENGRAVING COMPANY
7th & Sansom Streets, Philadelphia 6, Pa.

WHENEVER THERE IS A PACKAGING NEED

IN WAR...

JOHNSTON Foils

ALUMINUM...TIN...LEAD, COMPOSITION TIN, LEAD

IN PEACETIME INDUSTRY...

. . . . . ANSWER IT!

JOHNSTON Foils are now serving the national defense on all Fronts. When civilian production is again restored, JOHNSTON Foils . . . for modern packaging . . . will serve peacetime industry in ever-widening fields.

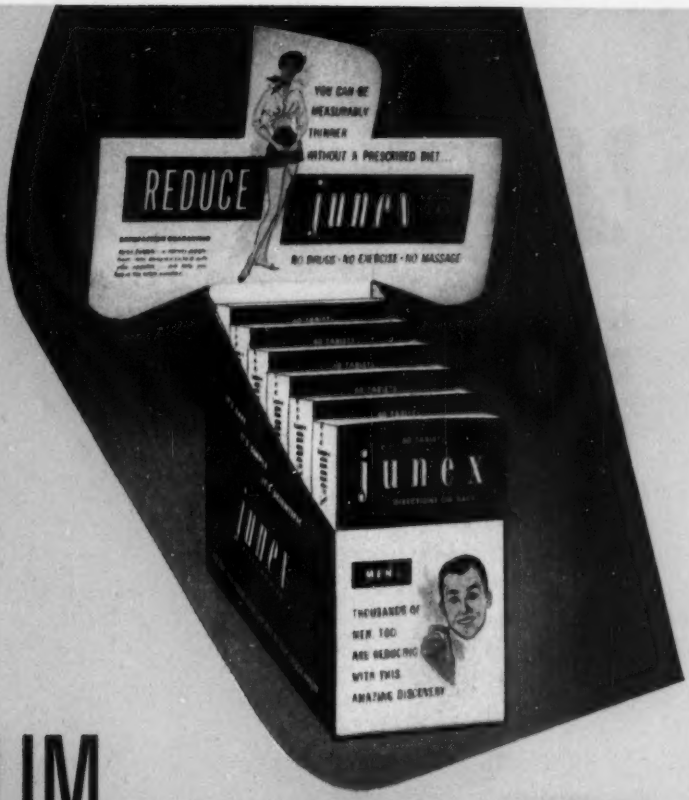
What are **YOUR** *needs?*

SINCE 1[illegible]

JOHNSTON FOIL MANUFACTURING CO.

6016-6298 S. BROADWAY ST. LOUIS 11, MO.

SALES OFFICES: 608 SOUTH DEARBORN . . . . . CHICAGO, ILLINOIS
34 EXCHANGE PLACE . JERSEY CITY, NEW JERSEY
633 SOUTH LA BREA AVE. . LOS ANGELES, CALIFORNIA



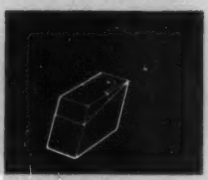
SLIM chance for millions...

thanks to Junex, packaged by Ritchie!

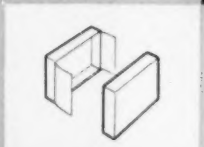
The makers of Junex held the tail of a tiger: a medically safe way to take off ugly fat. They called Ritchie and said, "Package it to sell!"

Ritchie did, creating (1) two attractive boxes—one for 60 tablets, one for 120 tablets; (2) arresting display pieces that held these boxes in an unusual "stepladder" fashion to make selection easy, get attention on busy counters; and (3) a unique mail order box.

The rest you know. And as with Junex, effective Ritchie packaging is helping build sales for hundreds of *other* famous products. The reason: it does more than just protect and contain . . . it reminds, attracts, *sells!*



COUNTER DISPENSERS serve as shipping containers, store compactly, and convert into point-of-purchase displays.



MAIL ORDER BOXES keep handling costs down with specially designed flaps which *close* and *seal* in one operation.

SEND FOR THIS USEFUL FREE BOOKLET! Whatever *your* packaging needs—folding cartons, set-up boxes, fibre cans, transparent packages, paper spools, displays or dispensers, tubes or cores—Ritchie has ready answers. Write for "101 Ways To Get Better Packaging." It's free!

W. C. *Ritchie* and COMPANY

8848 Baltimore Ave., Chicago 17, Illinois

NEW YORK, LOS ANGELES, DETROIT, DALLAS, DENVER, PROVIDENCE, ST. LOUIS, CLEVELAND, SEATTLE, JACKSONVILLE

DESICCITE 25*

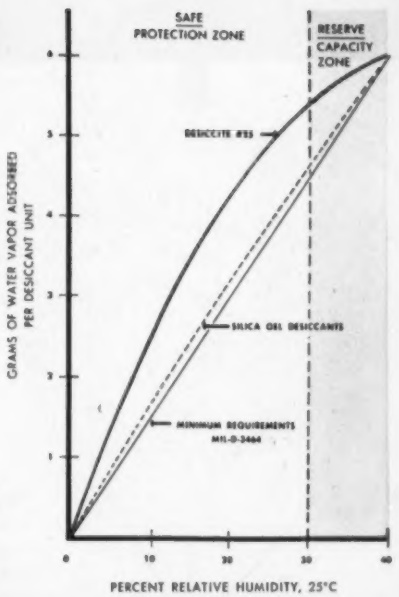
Desiccant for Method II Packaging **Under Specification MIL-D-3464**

A comparison of Unit performance is the only true and accurate basis for comparing packaging desiccants

For example, at 20% relative humidity a Unit of Desiccite #25 adsorbs over 43% more water than required by MIL-D-3464. The unexcelled adsorption capacity of Desiccite #25 over the entire protection range insures the lowest possible relative humidity inside the Method II package.

MANUFACTURED BY
DESICCANT DIVISION Filtrol CORPORATION

GENERAL OFFICES: 727 WEST 7TH STREET, LOS ANGELES, CALIFORNIA



Adsorption of water vapor by 1 Unit of Desiccite #25 compared with MIL-D-3464 and silica gel desiccant Units.

TO LEARN MORE ABOUT DESICCITE 25 AND SPECIFICATION MIL-D-3464

SEE US AT BOOTH 213

S.I.P.M.H.E. EXPOSITION

THE POINT WHERE PARALLELS MEET...

Deliveries of Cochran Aluminum Foil, made to customers in widely different fields, prove that no matter what *your* particular problems may be, our technical experts can work along parallel lines, until the point of a mutually satisfactory solution is reached.

This characteristic of the Cochran Company is not merely a matter of engineering excellence. It springs from a special conception of service . . . a unique, *personalized* service that goes far beyond all ordinary standards. People who do business with us can tell you how much this means.

Cochran FOIL COMPANY

INCORPORATED LOUISVILLE 10, KENTUCKY

SPECIALISTS IN ALUMINUM FOIL

SALES OFFICES: 714 Wrigley Building, Chicago 11, Illinois; 632 Fisher Building, Detroit 2, Michigan; 238 West Wisconsin Avenue, Milwaukee 3, Wisconsin; 500 Fifth Avenue, New York 36, N. Y.; Hippodrome Building, Cleveland 15, Ohio

Swift's Adhesives help you

serve at the family picnic, too!

This happy family may not know it — but adhesives serve them in dozens of ways every day. Many kinds of packages are sealed with adhesives . . . labels on bottles, cans and jars are applied with adhesives . . . countless other products are formed with adhesives.

In Swift's exceptionally varied line, there are numerous adhesives especially designed for packagers, bottlers and canners. Our years of experience — combined with our wide range of raw materials and extensive plant facilities — can help you find the adhesive that fits your requirements . . . lowers your operating cost.

Two of Swift's Adhesives for packaging operations

#1262 — Liquid adhesive for top and bottom sealing, tite-wrap work. A fast setting, clean machining, non-warp type adhesive.

Textite Flexible Glue — For quality setup box work . . . in convenient cake form. Non-warp type, light colored for finest work. Economical because of its better coverage.

Call **SWIFT** *first for* **ADHESIVES**

Swift & Company
Adhesive Products Department MP
Chicago 9, Illinois

This offer expires November 30, 1952

Please send your 100-lb. introductory trial shipment of

☐ Swift's #1262 Adhesive
☐ Swift's Textite Flexible Glue

} At the quantity price

These will be tested for use in our operations. We understand, if not fully satisfactory, they may be returned for credit at your expense.

Name _____ *Title* _____

Firm Name _____

Address _____

City _____ *State* _____

John Dale OF ENGLAND

for quality containers

Collapsible tubes, metal containers, closures to your exact specification—and made with p-r-e-c-i-s-i-o-n

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CALCUTTA, 1.

JOHN DALE
LIMITED

JOHN DALE LIMITED, BRUNSWICK PARK ROAD, NEW SOUTHGATE, LONDON, N.11, ENGLAND. TEL: ENTERPRISE 1272

"Will ours be as nice as these?"

Each year the promise of luscious, ripe vegetables is fulfilled in America's back-yard gardens. In increasing numbers, families are turning to amateur farming for healthful pleasures of the out-of-doors and the ultimate enjoyment of "home-grown" flavors.

Awakening our "green thumb" are the enticing catalogues and displays of the Garden Seed Companies. Their colorful, sparkling illustrations are a magic stimulus to eye and appetite.

Wherever fine reproduction is important to selling-in-print, Oxford quality papers make a vital contribution. For truer, more brilliant color values and clearer, more sharply defined halftones, it is well to specify from a wide selection of Oxford grades for your next printed promotion.

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Help Build Sales

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Mills at Rumford, Maine, and West Carrollton, Ohio

OXFORD PAPERS

Help Build Sales

For over fifty years Oxford Papers have helped good printing do a more effective job at a reasonable cost. Oxford provides a wide range of coated and uncoated papers for catalogues, brochures, labels, wraps, magazines, books and countless other printing and converting jobs. Whenever you plan a printed promotion, think first of your Oxford Merchant . . . his advice can be invaluable.

IT PAYS TO ASK FOR — AND USE THESE FINE OXFORD AND OXFORD MIAMI PAPERS

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Polar Superfine Enamel
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Maineflex Enamel Cover
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Mainefold Enamel
Mainefold Enamel Cover
North Star Dull Enamel
Seal Enamel
Engravatone Coated
Coated Publication Text

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Carfax Eggshell
Wescar Offset
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English Finish Litho
Super Litho
Duplex Label

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Bethlehem, Pa. . . Wilcox-Walter-Furlong Paper Co.
Boise, Idaho . . . . . Blake, Moffitt & Towne
Boston, Mass. . . . . Carter, Rice & Co. Corp.
Buffalo, N. Y. . . . . Franklin-Cowan Paper Co.
Charlotte, N. C. . . . . Caskie Paper Co., Inc.
The Charlotte Paper Co.
Chattanooga, Tenn. . . . Bond-Sanders Paper Co.
Chicago, Ill. . . . . Bermingham & Prosser Co.
Bradner, Smith & Co.
The Whitaker Paper Co.
Cincinnati, Ohio . . . . . The Johnston Paper Co.
The Whitaker Paper Co.
Cleveland, Ohio . . . . The Cleveland Paper Co.
Columbus, Ohio . . . . . Scioto Paper Co.
Dayton, Ohio . . . . . Cincinnati Cordage Co.
The Whitaker Paper Co.
Des Moines, Iowa . . . Bermingham & Prosser Co.
Detroit, Mich. . . . . Chope Stevens Paper Co.
Fresno, Calif. . . . . Blake, Moffitt & Towne
Hartford, Conn. . . . Green & Low Paper Co., Inc.
Indianapolis, Ind. . . . . MacCollum Paper Co.
Jacksonville, Fla. . . . . Jacksonville Paper Co.
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Put Your Over-Weights On A HY-TRA-LEC Diet

REDUCE THOSE COSTLY OVER-WEIGHTS to a minimum with a high speed Wright Hy-Tra-Lec weighing system.

HY-TRA-LEC is the modern, accurate method of weighing and filling. The principle of "positive displacement" is employed rather than spring or beam scales as in conventional weighing machines. Now saving money for hundreds of plants including the leaders in the candy, cracker, cookie, pretzel, potato chip and food fields. Range: one-half ounce to 16 ounces. Available in a variety of models for either semi-automatic or fully automatic lines.

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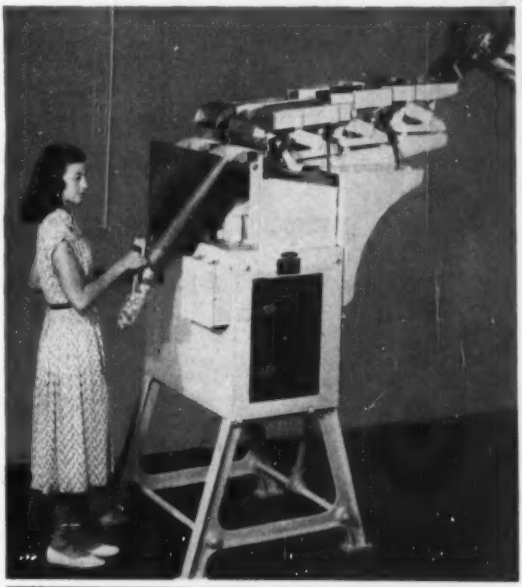

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He put up a good fight

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That once familiar sight, the cigar-store Indian with his tomahawk and other accessories, is an all but vanished American. And gone with him are the awkward, inadequate tobacco containers of his day.

Today, tobacco is packed in special tins that are designed to keep moisture and dirt out . . . and the flavor and aroma in! It's a can that keeps tobacco fresher . . . longer!

The modern tobacco can, ideally shaped for convenience and protection, is another example of Canco's ability to design and produce *superior containers* for *special products!*

Canco, combining versatility and a background of over half a century in the packaging field, will continue to pioneer improvements for its customers.

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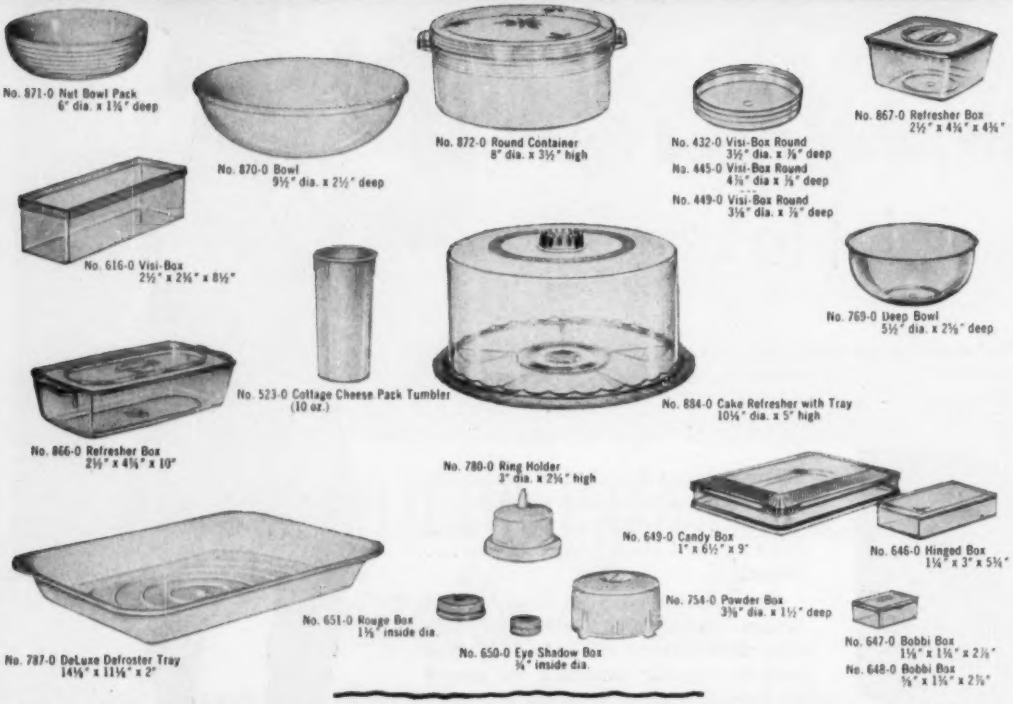
BUSY showing your product . . . BUSY keeping your products fresh . . . BUSY promoting greater sales for you!


No. 871-0 Nut Bowl Pack
6" dia. x 1¾" deep
No. 870-0 Bowl
9½" dia. x 2½" deep
No. 872-0 Round Container
8" dia. x 3½" high
No. 432-0 Visi-Box Round
3½" dia. x ⅞" deep
No. 445-0 Visi-Box Round
4⅜" dia x ⅞" deep
No. 449-0 Visi-Box Round
3¼" dia. x ⅞" deep
No. 867-0 Refresher Box
2½" x 4¼" x 4¼"
No. 616-0 Visi-Box
2½" x 2¼" x 8½"
No. 523-0 Cottage Cheese Pack Tumbler
(10 oz.)
No. 884-0 Cake Refresher with Tray
10¼" dia. x 5" high
No. 769-0 Deep Bowl
5½" dia. x 2⅛" deep
No. 866-0 Refresher Box
2½" x 4¼" x 10"
No. 780-0 Ring Holder
3" dia. x 2¼" high
No. 649-0 Candy Box
1" x 6½" x 9"
No. 646-0 Hinged Box
1¼" x 3" x 5¼"
No. 651-0 Rouge Box
1⅛" inside dia.
No. 650-0 Eye Shadow Box
¾" inside dia.
No. 754-0 Powder Box
3⅛" dia. x 1½" deep
No. 647-0 Bobbi Box
1⅛" x 1⅛" x 2⅛"
No. 648-0 Bobbi Box
⅞" x 1¾" x 2¾"
No. 787-0 DeLuxe Defroster Tray
14⅛" x 11¼" x 2"

FEDERAL creates re-usable containers to fit **ANY PRODUCT**

Small or large boxes—transparent or opaque boxes—hinged or plain boxes—compartment boxes—intricate design boxes and containers.

There's a **FEDERAL** rigid STYRON plastic container for every packager of dairy products, foods, confections, cosmetics, class or bulk merchandise.

If your product requires special packaging **FEDERAL** will design and mold to your exact specifications.

No. 645-0 Heart Box

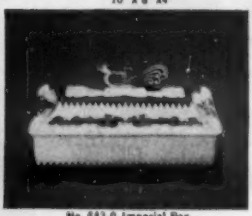
No. 644-0 Pagoda Candy Dish
7¼" x 1½"

No. 642-0 Lotus Bar
10" x 8" x4"

No. 640-0 Buddha Box
8½" x 4¼" x 6½"

FEDERAL VISI-BOX CONTAINERS
STYRON
Guaranteed by Good Housekeeping

No. 641-0 Ming Three Drawer Chest
7½" x 4½" x 5½"



No. 643-0 Imperial Box
8" x 4" x 4"

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FEDERAL designs and manufactures Polystyrene caps for the glass packaging industry.

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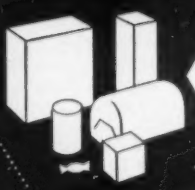
QUALITY Integrated production—our own paper mill gives Quality Control at the source, which guarantees Uniformity.



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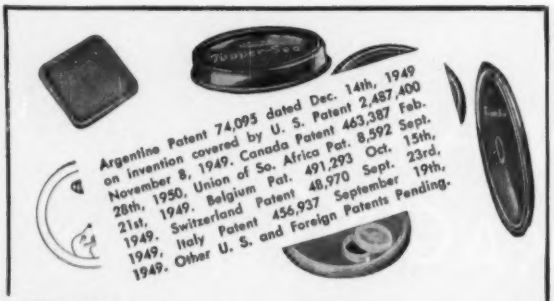
Tupper Seal, air and liquid tight flexible covers fit, and are included in the sets of all Tupperware Canisters.



Argentine Patent 74,095 dated Dec. 14th, 1949 on invention covered by U. S. Patent 2,487,400 November 8, 1949. Canada Patent 463,387 Feb. 28th, 1950. Belgium Pat. 491,293 Sept. 15th, 1949. Switzerland Patent 48,970 Oct. 23rd, 1949. Italy Patent 456,937 September 19th, 1949. Other U. S. and Foreign Patents Pending.

TUPPER! Seals

air and liquid-tight, flexible covers for Tupperware Tumblers, Canisters, Wonder Bowls, Cereal Bowls and many another container of glass, metal and pottery, the contents of which it is desired to keep fresh and wholesome.

TUPPER!

The Tupperware 50 oz. Canister is "standard equipped" with the Tupper Seal, air and liquid-tight flexible Pour All cover.

The Tupper Seal, air and liquid-tight flexible Pour All cover is used on every Tupperware 20 oz. Canister.

The Tupper Seal, air and liquid-tight, Pour All cover as a cover for 46 oz. can; Tupperware Sauce Dishes and other containers of metal, glass or pottery. Foods easily dispensed without removing entire cover.

The Tupperware Wonder Bowls are usually fitted with Tupper Seal, air and liquid-tight covers.

FORMAL NOTICE! 9th November, 1949

EXCLUSIVE!

U. S. Patent #2,487,400

The Tupper Corporation has attained a position of leadership in this industry by incurring great expense and expending painstaking effort in the development, design, manufacture and exploitation of its many world-known products.

The Tupper Corporation further has anticipated the inevitable attacks to which leadership is subject and has taken measures provided by law to preserve the creative rights to its products, methods and design by patent protection both in the United States and abroad.

Tupper Seals for Tupperware shown in this advertisement are just a few of the forms covered in this manner and are specifically covered by U.S. Patent #2,487,400.

Only the Tupper Corporation, by U.S.Patent #2,487,400 has the right to make, use and vend container closures in connection with any and all types of containers throughout the United States and its territories as covered by the claims of the Patent.

Tupper Corporation will protect, according to law, the exclusive rights above granted

TUPPER CORPORATION

There's a Tupper Seal, air and liquid-tight flexible cover for Tupperware 2, 5, 8 and 12½ oz. Tumblers too, and these Tupper Seal, covers fit many other containers of metal, glass and crockery.

The Tupper Seal, air and liquid-tight flexible Pour Top cover, specially designed as a dispensing cover for specified diameters of containers holding foods such as syrups, salad dressings, catsup.

The cover of the Tupperware Bread Server which serves as a bread tray also is designed to give similar results as Tupper Seal, air and liquid-tight Flexible covers. Keeps contents fresh as no other such container.

When equipped with Tupper Seal, air and liquid-tight, flexible covers, Tupperware Cereal Bowls serve many another purpose.

The Tupper Seal, air and liquid-tight flexible cover made for Tupperware 8 oz. Tumblers also fits and is sold with all Tupperware Funnels as a base when funnels are used as storage containers.

TUPPER CORPORATION

Manufacturers of — CONSUMER, INDUSTRIAL, PACKAGING AND SCIENTIFIC PRODUCTS

FACTORIES: Farnumsville, Mass., and Cuero, Texas **New York Show Rooms 225 Fifth Ave.**

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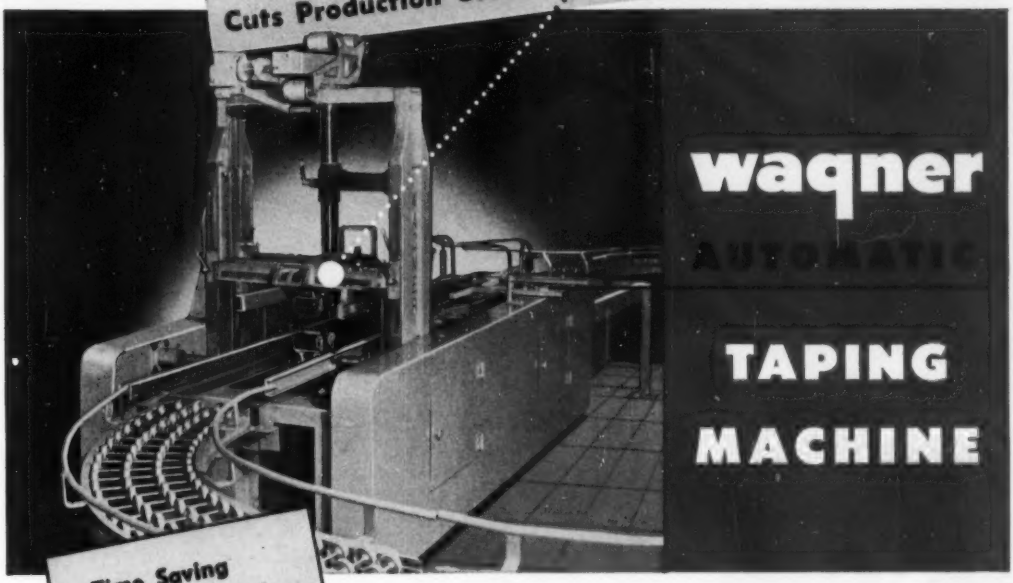
THE ONLY CARTON CLOSING MACHINE OF ITS KIND IN THE WORLD!

Cuts Production Costs — **Permits Carton Re-Use**



waqner AUTOMATIC TAPING MACHINE

Time Saving Profit Making DESIGN FEATURES

- **Saves Labor.** Operates automatically without special supervision.
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- **Saves Time.** Adjustable to variable speeds to fit your packing line.
- **Saves Accidents and Down Time.** Moving parts fully guarded, yet easy to reach for maintenance.

Now you can automatically tape cartons neater, faster and at far less cost. For the compact, efficient Wagner Automatic Taping Machine can be tuned to your production line to tape up to 50 cartons a minute.

Through Automatic Taping — you eliminate supervision, and slash carton-sealing labor costs. Your taping job is done simply and quickly . . . neatly. A neater package means greater carton acceptance, thus increasing carton return trips and drastically cutting single trip carton costs.

It's these extra savings that add up to sound plant economy. Investigate the new Wagner method of carton sealing. Write Wagner today!

WAGNER Automatic Taping Machine is used by leading breweries everywhere

Write for **FREE** Bulletin

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Please send me bulletin 167 describing the WAGNER AUTOMATIC TAPING MACHINE.

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Company.....
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BASIC DISCOVERIES THAT PACED PROGRESS

I = E/R
George Simon Ohm gave us the basic electrical formula, or "Ohm's Law." The current, I, flowing through a conductor is equal to the electromotive force, E, divided by the resistance, R.
One of countless applications of Ohm's Law is found in the electric toaster, where heat is built up by increasing resistance to the current.

KVP

PAPERS for the FOOD INDUSTRY

THE DISCOVERY that certain papers have excellent food protection properties has contributed substantially to progress in the food industry. So has the development of colorful wrappers that attract more customers at the point of sale.

KVP is a pioneer in serving the field. KVP provides complete line of papers for protecting the flavor and cleanliness of processed foods . . . plus complete design and printing service to add stimulating sales appeal. It is always a pleasure to work on new packaging problems.

KVP

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FISH • FRUIT • FROZEN FOODS
POULTRY • SHORTENING • VEGETABLE

Catch women the easy modern way

Package in Plaxpak® Squeezable Bottles

Packaging that stopped women in the 1940's won't even slow them down in the 50's or 60's. In girding yourself for the fast merchandising foot race ahead, consider the Plaxpak plastic bottle. Here's packaging as contemporary as the isotope, yet as futuristic in outlook as interplanetary travel. Here's unique convenience for your product . . . *unbreakability, squeeze dispensing and lightness.* As for color, look at a rainbow . . . it's yours to use in capturing the eye.

PLAX CORPORATION Subsidiary of Emhart Mfg. Co. WEST HARTFORD, CONNECTICUT

In Canada: Plax Canada, Limited, Toronto ——— District Sales Offices: New York, Chicago and other principal cities.

Plax® blow molded products made under U.S. Pats.: 2129239, 2175053, 2175054, 2230188, 2230190, 2260750, 2283751, 2349176, 2349177, 2349178.

From the Gardner Gallery of famous American Packages

An Attitude

...THE UNSEEN INGREDIENT

Actually, it *can* be seen. Look closely at any product that has become an American buy-word—and you'll see more than the physical materials of which it is made.

You'll see the attitude of men determined to make and market a superior product. Look closely at any Gardner carton—and you'll see reflected that very same attitude.

Here at Gardner we believe in never being quite satisfied with a good job. We feel an obligation to ourselves—and to our customers—to do even better, tomorrow, what we have gained recognition for doing well today.

We think that's an important reason why you'll find so many of America's most famous products packaged in Gardner cartons.

THE GARDNER BOARD AND CARTON CO.

Manufacturers of Folding Cartons and Boxboards

GENERAL OFFICES: Middletown, Ohio—PLANTS: Middletown, Ohio; Lockland (Cincinnati), Ohio
Sales Offices in Chicago, Cleveland, New York, Philadelphia, Pittsburgh, St. Louis

◄ Package Design: Lloyd L. Duke, Evansville, Indiana

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Whether your product is fine as talcum or big as baseballs . . .

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There's a Bemis Bag that will do your job efficiently and economically.

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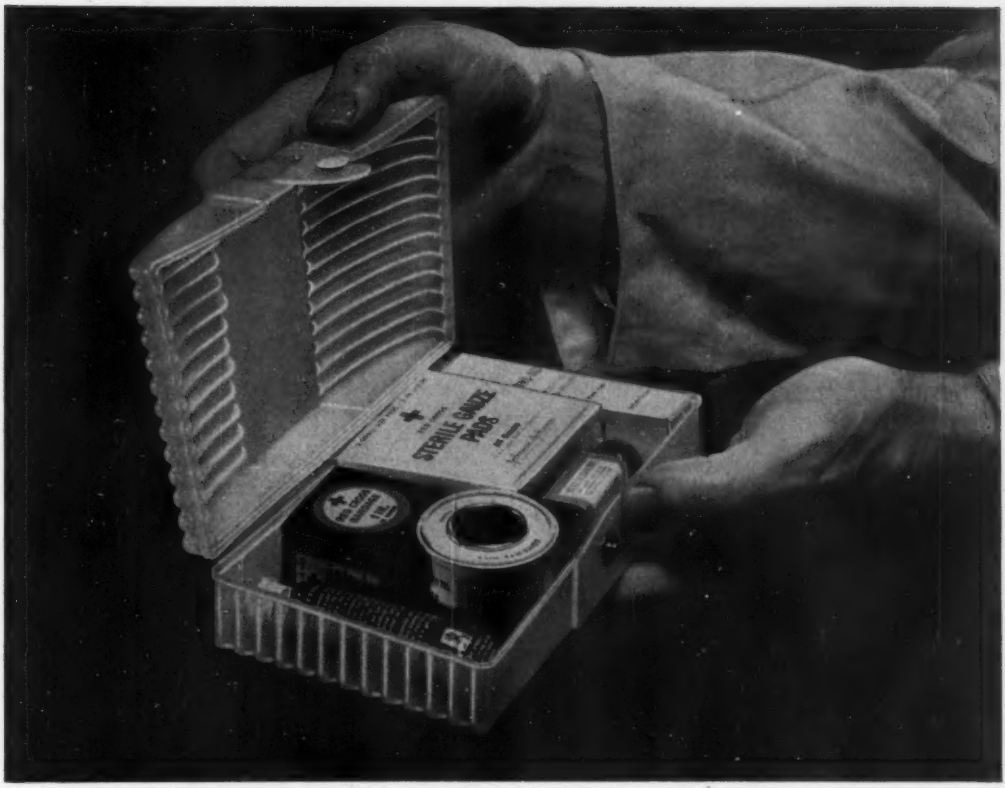

New first aid kit of Du Pont "ALATHON" has self-hinge . . . is molded in one piece

It's another packaging improvement made possible by the outstanding properties of "Alathon"

Lid, *hinge* and tray—all three parts of this new first aid kit are molded in one piece of Du Pont "Alathon"* polythene resin. Specifically designed for the self-hinge feature, "Alathon" had the necessary properties to mold the kit successfully.

"Alathon" is strong and tough—even in flexible sections as thin as this hinge. Flexed time after time, the hinge remains unharmed. And "Alathon" is readily molded into intricate shapes. This kit, for example, features a ribbed lid, the hinge, and a ribbed, sectioned tray—all molded in one piece in one operation.

"Alathon" contains no plasticizer yet combines light weight and toughness even in thin sections. It is odorless, tasteless, non-toxic, and inert to most packaged goods at room temperatures. Because of this unique combination of properties, "Alathon" is used for many different applications in the packaging industry. Closures and other components are economically injection-molded of "Alathon" to close tolerances. In addition, "Alathon" is widely used as a coating for paper. Blended with waxes, it improves the heat-sealing characteristics, appearance and scuff-resistance of waxed papers.

We suggest you investigate the properties of "Alathon" for your future packaging application. We'll gladly discuss the availability of quantities for development work. For further information, write:

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. . . THROUGH CHEMISTRY
Polychemicals
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IS "CART-N-SEEL 233H" REALLY A BETTER GLUE?

Here are a few case histories from our files showing how Cart-N-Seel 233H solved a wide range of packaging problems where other glues failed to give satisfactory results, or were too expensive.

CASE NO. 1—Sealing cartons 10½" x 3" x 5", made from coated chipboard, glossy finish. Jones Carton Sealing Machine. Compression time 25 seconds. Speed 85 cartons per minute. Because of the short compression time, small glue area and springy board, customer was using an expensive resin glue. Cart-N-Seel 233H Glue replaced the resin with outstandingly good results. Result: A very substantial monetary saving to the customer, and greater ease of cleaning machine and compression belt.

CASE NO. 2—Sealing cartons 10" x 1" x 2¼" on Ceco Sealer at 90 per minute. Replaced expensive resin glue.

CASE NO. 3—Sealing cartons 12" x 3" x 7" made from coated chipboard, using Stokes & Smith Neverstop Machine. Compression time 40 seconds. Speed 135 to 280 cartons per minute. Carton has Van Buren ears. Customer needed glue having exceptionally good tack and long temper. After exhaustive tests Cart-N-Seel 233H was selected in preference to all others.

CASE NO. 4—Forming and sealing cartons 5¾" x 1¾" x 3¾" with glassine inner liner on Pneumatic Scale Company Double Package Maker. Customer was looking for an adhesive fast enough to work on cold mandril. After testing numerous glues, the customer decided upon Cart-N-Seel 233H as performing the best of all, and is now using it regularly.

CASE NO. 5—Sealing cartons 7" x 2¼" x 5" on Pneumatic Scale Top and Bottom Sealer at 90 per minute and then tight wrapping the package with a varnished wrap on Pneumatic Scale Tight Wrappers at 42 to 48 per minute. Customer had difficulty finding a glue to do all three operations satisfactorily. Tried Cart-N-Seel 233H. Found it perfect for all three jobs and is now using it regularly.

CASE NO. 6—Sealing flaps of solid fibre shipping cases for frozen foods on Standard-Knapp automatic case sealer at 20 to 35 cases per minute. Cases must withstand refrigeration without popping open. Customer was unable to obtain satisfactory results with numerous case sealing glues he tried. Cart-N-Seel 233H was put on the machine. Worked perfectly. Withstood refrigeration excellently. Customer using Cart-N-Seel 233H regularly with complete satisfaction.

YOU BE THE JUDGE!

For further information write

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Ethical Drug Products Must Be Above Reproach ...*In All Things*

THE *appearance* of integrity and superb quality, as well as the *fact* of it, is highly important to the products of ethical drug manufacturers. There is *no* better way to insure that sort of appearance, and to inspire customer confidence, than to package drug products in cartons that are outstandingly white, bright, nice to look at and to handle. That is why so many *leading* drug firms invariably specify Ridgelo packaging . . . the peerless quality, all custom made, clay coated boxboard.

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Ridgelo is beyond comparison for...

- ★ Absolute uniformity, re-order after re-order.
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- ★ Choice of customized finishes and coatings.
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Aluminum Packaging by Taranger

--serving the small and medium-size user

To a larger extent every day, packagers who haven't yet achieved "giant industry" size are turning to Taranger for printed and multi-printed aluminum foil, collapsible aluminum tubes and impact extruded aluminum packages. Taranger stresses *service* — therefore these small and medium-size companies know that their requirements will be handled promptly and efficiently . . . and that their orders will be filled with high quality, flaw-free aluminum packaging materials.

ALUMINUM FOIL Printed and multi-printed sheets or rolls, plain or custom laminated. For box wraps, candy, floral and gift packaging and other uses. A complete range of sizes, types and widths, converted or unconverted.

COLLAPSIBLE ALUMINUM TUBES Have you explored their use for packaging food products? Available with coatings, linings and decorating to your order. All sizes and types.

ALUMINUM IMPACT EXTRUSIONS Unique rigid packages (cylinders, tubes and bottles) that protect products from light, moisture, handling, etc. For cigars, cosmetics, foods, photographic, electronic and radio equipment and the like.

IS YOUR PRODUCT EXPORTED?
We have a money-saving arrangement of particular interest to companies which package products in aluminum for export. Ask for details.

E. Taranger, INC.
441 LEXINGTON AVENUE
NEW YORK 17, N.Y.

IT'S TARANGER . . . FOR SERVICE . . . IN ALUMINUM

CULLIGAN®

desiccants

APPROVED UNDER SPECIFICATION MIL-D-3464

ideal for method II dehydrated packaging

When parts and equipment must be packaged moisture-free . . . specify Culligan Desiccants. Millions upon millions of bags of Culligan Desiccants have been delivered for a multitude of Method II dehydrated packaging applications. The fact that over 2,000 leading organizations have consistently specified Culligan Desiccants is your assurance of service, quality and reliability.

inquire about **CULLIGAN DESICCANTS** *for dehydrated packaging of foods and pharmaceuticals*

- Culligan Desiccants are backed by years of research, production and performance.
- National field staff service of expert Culligan packaging engineers.
- Available in all standard bag sizes, in bulk or custom packaged to fit your immediate needs.
- Two convenient shipping points: Northbrook, Illinois (suburb of Chicago) San Bernardino, Calif.

CULLIGAN DESICCANTS

Copr. 1952 Culligan Zeolite Co.

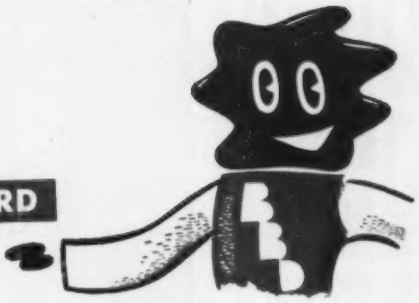
for literature and information, write:

DESICCANT DIVISION, **CULLIGAN ZEOLITE COMPANY** HOME OFFICE: **NORTHBROOK, ILL.**

Exclusive distribution in Canada by Canadian Industries, Ltd., offices in principal cities.

For sharp, color-bright aniline printing

on BOXBOARD



on KRAFT

...use this famous combination

BBD "Tailor-Made" ANILINE INK

If you want to turn out aniline printing with a *quality* look — on boxboard, on kraft, on any other packaging material — use *quality* inks by BBD. "Tailor-made" in either pigmented, dyestuff or combination formulations to suit your specific needs, BBD INK assures top-quality reproduction and top performance on any aniline press...with or without metered inking rolls. Try BBD ANILINE INK and see for yourself its superior color strength, printability and mileage.

For specific information...and printed samples that tell BBD's quality story better than words...write to Bensing Bros. & Deeney, 3301 Hunting Park Avenue, Philadelphia 29, Pa.

BBD "Shirt-Sleeve" Service

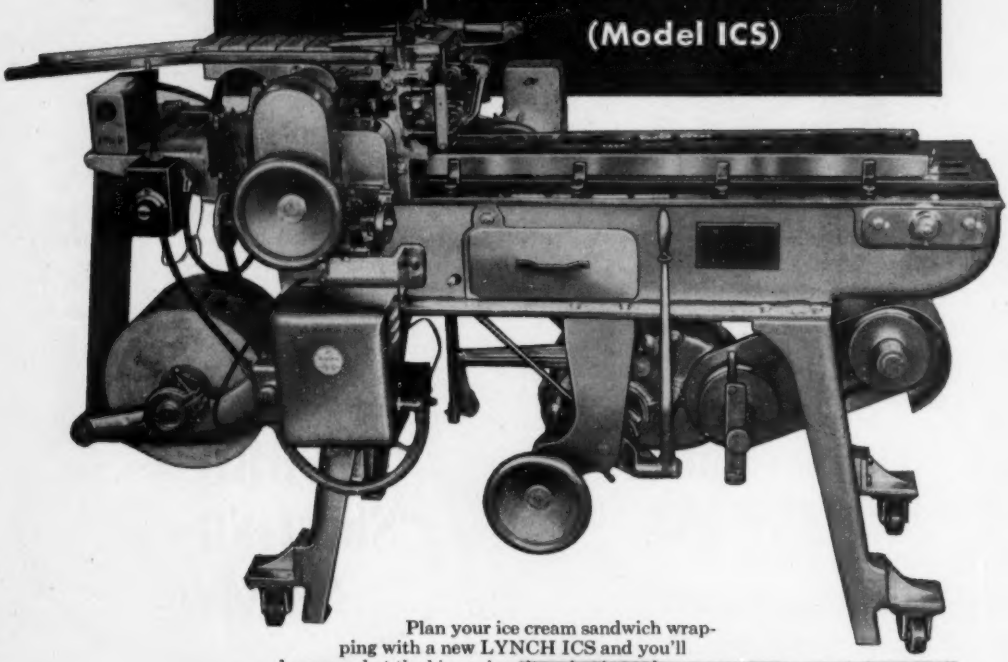
When you need help on an aniline ink problem call in the BBD field-man in your locality. He's an aniline ink *specialist* who is ready, willing and able to roll up his sleeves and tackle your problem right at the press.

Bensing Bros. and Deeney
SALES COMPANY
World's Largest Makers of Aniline Ink
PHILADELPHIA · CHICAGO · WAKEFIELD, MASS.
Pacific Coast: A. M. BOJANOWER, Los Angeles
Export: McLAURIN-JONES CO., New York
Canada: MANTON BROS., Toronto

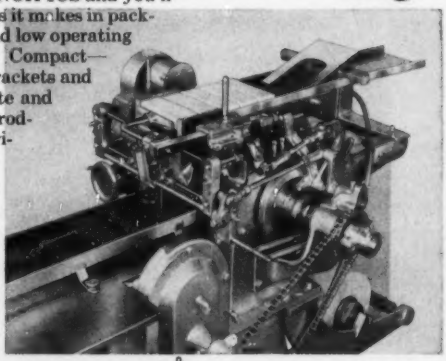
LYN Announces

the new ICE CREAM SANDWICH WRAPPING MACHINE

(Model ICS)



Plan your ice cream sandwich wrapping with a new LYNCH ICS and you'll be amazed at the big savings it makes in packaging costs. With low initial price and low operating cost, it gives you these desirable features: Compact—requiring little space; Portable-mounted on brackets and casters; Easy to clean and sterilize, meeting State and Federal sanitation requirements (metals contacting product are stainless); No product—no paper feed; Variable speed drive wrapping 30 to 120 packages per minute. Standard equipment includes heat seal (no glue), wrap register unit with electric eye and ½ H.P. moisture-proof motor. For more details about LYNCH ICS write or call the Packaging Machine Sales Dept.



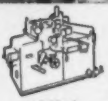
Feeding, Wrapping and Sealing Unit.

PAR AIR COMPRESSORS

PAR REFRIGERATION COMPRESSORS

WRAP-O-MATIC CANDY & COOKIE WRAPPING MACHINES

LYNCH
CORPORATION
PACKAGING MACHINE DIVISION
TOLEDO, OHIO
BRANCHES: NEW YORK • CHICAGO
SAN FRANCISCO • ATLANTA



MORPAC PAPER PACKAGING MACHINES

MORPAC BUTTER & OLEO PACKAGING MACHINES

GLASS FORMING MACHINES

Like IKE or ADLAI?

In an election year everybody's ads are "messages" or slanted. We're being different. Here are 40 advertisements for "the man of your choice." Put them on your mail . . . packages . . . on your water cooler, if you like . . . any place. But remember: when you need true-to-life color reproduction in labels, displays, postcards or 24-sheets, and service at its best, call Crocker . . . of course!

Crocker's Course

H. S. CROCKER CO., INC.
SAN FRANCISCO, 720 Mission Street • Phone DO 2-5800
LOS ANGELES, 2030 East 7th Street • Phone TR 8351
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FOR LICKING THE TOUGH ONES
Call CROCKER'S ... of course!

FOR LICKING the TOUGH ONES!

Call Crocker's! Thousands of packers, manufacturers and advertising agencies have found the answer to their tough printing problems with Crocker's complete plant facilities and know-how.

Crocker's Course

H. S. CROCKER CO., INC.
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THE LEADERS IN "MIXES"

. . . packaged by PNEUMATIC!

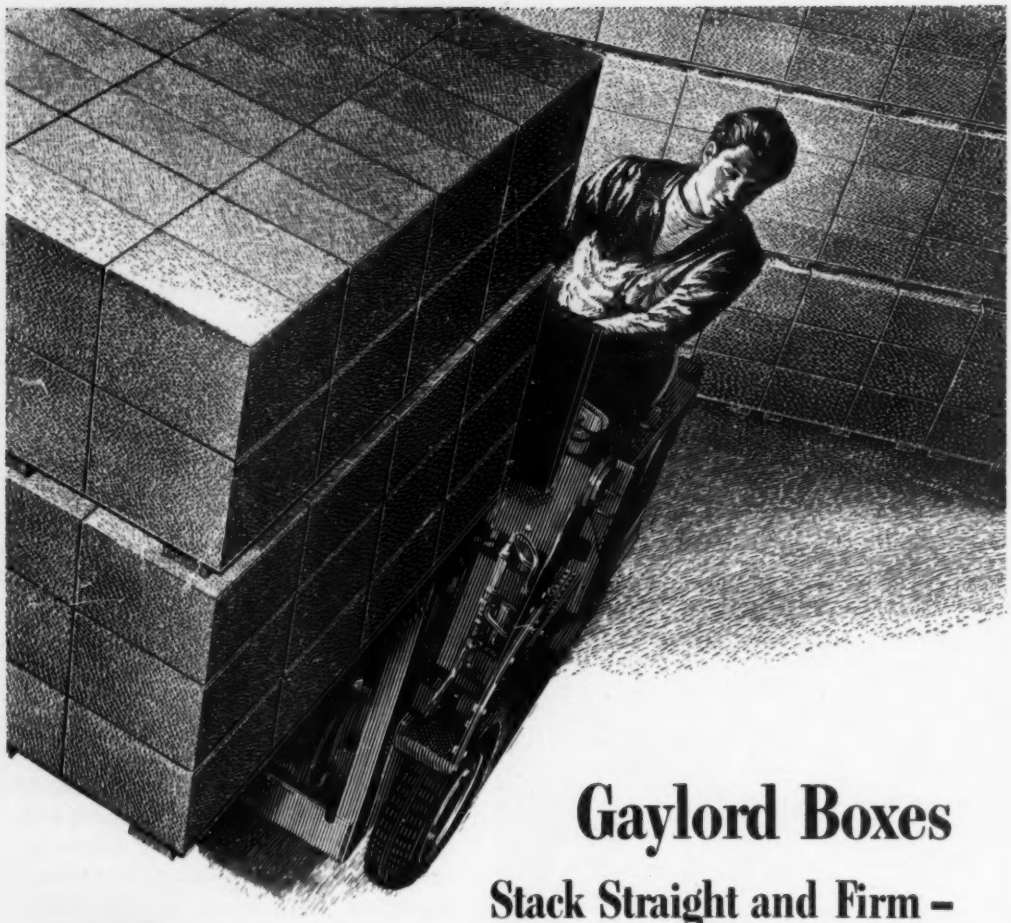
That Pneumatic equipment is particularly suited to the requirements of the flour field almost goes without saying when you see the "line up" of packaged flours and prepared mixes handled on Pneumatic machines.

You know them all, because they include all the best known names in this category of packaged food. Their containers differ in size and construction, according to individual preferences and needs. But, one thing they share in common – the "lower cost per container" operation – and savings – of Pneumatic equipment.

PNEUMATIC SCALE CORP., LTD.
82 Newport Avenue, Quincy 71, Massachusetts
Also: New York; Chicago; San Francisco; Los Angeles; Seattle; Leeds, England.

PNEUMATIC

Packaging and Bottling Equipment



Gaylord Boxes

Stack Straight and Firm – Save Time and Labor in Handling

Their unseen quality gives you an extra margin of safety.

The strong, rigid corrugations of Gaylord Boxes plus their accurate scoring assure flaps that close perfectly.

This controlled quality means a real saving of time and labor—as well as tempers—on the production line as well as in the warehouse.

Gaylord's Research and Engineering Division is at your service. Check with the sales office nearest you for the latest developments in packaging for your industry.

GAYLORD CONTAINER CORPORATION

General Offices: ST. LOUIS • Branches: New York • Chicago • San Francisco • Atlanta • New Orleans • Jersey City • Indianapolis • Los Angeles Seattle • Houston • Oakland • Minneapolis • Detroit • Columbus • Fort Worth • Tampa • Dallas • St. Louis • Cincinnati • Des Moines Oklahoma City • Portland • Greenville • San Antonio • Memphis • Kansas City • Bogalusa • Chattanooga • Milwaukee • Weslaco • New Haven Amarillo • Appleton • Hickory • Sumter • Greensboro • Jackson • Miami • Omaha • Mobile • Philadelphia • Little Rock • Charlotte • Cleveland

CORRUGATED AND SOLID FIBRE BOXES • FOLDING CARTONS • KRAFT BAGS AND SACKS • KRAFT PAPER AND SPECIALTIES

In every field there are recognized leaders to whom quality of product is the supreme consideration.

To such leaders in the packaging and converting fields, Kidder presses and slitters have long constituted the standard by which other equipment is judged. In Kidder multi-color rotary presses for aniline, rotogravure, and letterpress, nothing is spared to achieve the known requirements for perfect printing. In slitting, Kidder's shear-cutting action results in clean, accurate, dustless rolls.

For information concerning the finest equipment to fill your converting needs, write:

Kidder

PRESSES • SLITTERS

KIDDER PRESS COMPANY, INC., DOVER, NEW HAMPSHIRE • EMPIRE STATE BUILDING, NEW YORK 1, NEW YORK
MACHINERY SERVICE CO., LOS ANGELES 22 CALIFORNIA

RADO PACKAGES

OPEN AMAZING NEW SALES POSSIBILITIES

RADO PACKAGES* are the sort of things Sales Managers and Marketing Directors dream of but rarely find—practical, radically new, low-cost packages that ideally lend themselves to all-out consumer promotion.

RADO PACKAGES are *all plastic*. They are made automatically and continuously from a wide range of thermoplastic materials, both clear and opaque. The packages are made and filled simultaneously and can be of regular or irregular shape.

Equally suitable for liquids or pastes, RADO PACKAGES can even be produced in the form of unique capless collapsible tubes which have self-sealing apertures.

If you feel your product could benefit from this *new type of packaging* that is novel, practical, low cost and wonderfully responsive to consumer promotion, write to the Main Office of Technopol Laboratories, or to the Packaging Service Station nearest you for additional facts.

*U.S.A. Patent Nos. 2,517,027, 2,530,400
British Patent Nos. 599174, 599183
Patented in 36 other countries. Other patents pending.

TECHNOPOL LABORATORIES LIMITED

Tel: London Wall 9452-9453 • 212 St. John Street, LONDON, E. C. 1, England • Cables, Telabor, London

Factories and Packaging Service Stations:

S. AFRICA
UNIVERSAL PLASTIC PACKS (PTY.) LTD.
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Smith Street, DURBAN.

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Firenze

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Factory: 24 Avenue de la Republic, CHATOU, France. Tel: 274.

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Factory: 68-7 Rue de l'Agrafe, Anderlecht, BRUSSELS. Tel: 22,19,32.

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Office: Claridenhof. Dreikonigstrasse 21, ZURICH. Tel: (051) 27.24.47/ 25.00.80.
Factory: Obfelden.

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Tupla Gesellschaft, Vienna IV., Wiedner Hauptstrasse 8
Telephone: A 34067

EIRE
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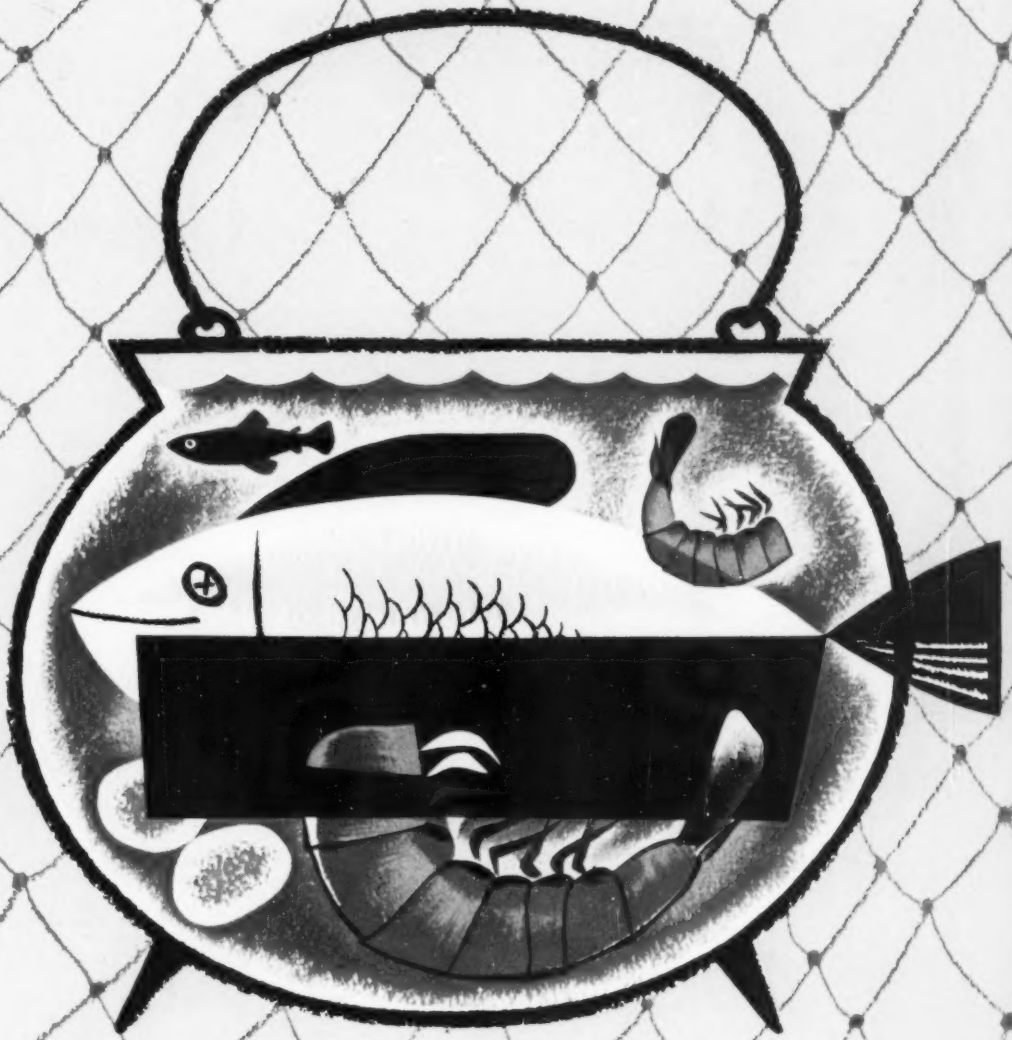


Frozen Food Wrappers for Seafood

WESTERN WAXED PAPER DIVISION · CROWN ZELLERBACH CORPORATION

San Leandro, California · East Los Angeles 54, California · North Portland, Oregon

REG. U.S. PAT. OFF.

SCOTCH BRAND Cellophane Tape

NOW 3 WAYS IMPROVED!

STICKS TIGHTER!
New high-tack adhesive takes a good firm grip . . . holds tighter than ever!

UNROLLS EASIER!
Thanks to exclusive new back-sizing, this new tape comes off the roll twice as easily!

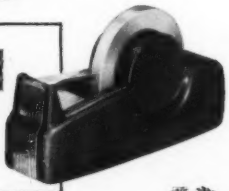
RESISTS BREAKING!
Tougher, more pliable construction means a tape that does a perfect job without splitting or breaking!

3 OUT OF 4 Shoppers prefer cellophane tape-sealed purchases!

It's a fact! A recent survey of hundreds of shoppers revealed that *3 out of 4* prefer cellophane tape to any other sealing method!

See your jobber today for a supply of "Scotch" cellophane tape . . . it speeds all kinds of sealing, holding, mending jobs throughout your store!

REG. U.S. PAT. OFF.
SCOTCH BRAND
Cellophane Tape



The term "Scotch" and the plaid design are registered trademarks for the more than 200 pressure-sensitive adhesive tapes made in U.S.A. by Minnesota Mining & Mfg. Co., St. Paul 6, Minn.—also makers of "Scotch" Sound Recording Tape, "Underseal" Rubberized Coating, "Scotchlite" Reflective Sheeting, "Safety-Walk" Non-slip Surfacing, "3M" Abrasives, "3M" Adhesives. General Export: 270 Park Avenue, New York 17, N.Y. In Canada: London, Ont., Can.

3M

U.S. Automatic Machines
FILL YOUR PACKAGES BEST

THE MODEL TBS
For Automatic Tablet or Pill Counting and Filling

The fully automatic Model TBS fills bottles, cartons, boxes and other rigid containers with any desired count of pills, tablets and capsules unerringly and rapidly. It mechanically counts and drops tablets into the container, producing up to 150 filled bottles or boxes per minute depending upon the count. Because of its unique and simple design, it may be economically, easily changed over to suit a wide range of requirements.

THE SCOTT NET WEIGHER
For Packaging Free-Flowing Materials

For weighing and filling free-flowing and semifree-flowing materials into cans, bottles, cartons or bags, Scott Net Weighers have no equal for speed and accuracy. A single Dump Scott Net Weigher will operate semiautomatically at speeds up to 35-40 packages per minute; automatic units up to 60 per minute. Scott Scales are made in several sizes and types to suit product and weight specifications.

THE BOND FILLING MACHINES
For Nonfree-Flowing, Powdered and Granular Materials

Semiautomatic and fully automatic high-speed Bond Fillers handle a wide range of nonfree-flowing or dusty materials, filling at speeds up to 120 packages per minute. Bond Auger Filling machines with one, two or four filling stations are available for volume filling, gross weighing or packing.

THE MODEL C-10-CC
For Cartoning Candy

This versatile machine is receiving wide acceptance in the candy industry. It is possible on the one machine to fill an entire range of candy items without the use of extra equipment provided the same size carton is used. The C-10-CC automatically opens flat folded cartons, tucks bottoms, cuts, forms and inserts liner, volume fills candy, then folds and tucks liner top flap of carton. The liner may be omitted when desired.

These and other machines manufactured by **US** will fulfill your requirements for packaging machinery. It will pay you to discuss your problem with **US** as it has the packers of the containers shown. Write **US** today.

US

NET & GROSS WEIGHING ★ PACKAGE FORMING & FILLING ★ CARTON SEALING, LINING, WRAPPING ★ BOX MAKING

AUTOMATIC BOX MACHINERY CO., INC.

Owning and Operating NATIONAL PACKAGING MACHINERY CO. ★ CARTONING MACHINERY CORP.

122 ARBORETUM ROAD ROSLINDALE, BOSTON 31, MASS.

New easy way to wrap **HAMS** *and* **BACON**

Paterson
"TRIP-L-WRAP"

complete sets of smoked meat wrappers

PAT. PENDING, P.P.P. CO., E.P.
1. Outside wrapper of wet-strength, grease-resisting Patapar Vegetable Parchment
2. Middle wrap of absorbent paper
3. Inner grease-resisting barrier

The new Paterson "Trip-L-Wrap" combines an inner grease-resisting barrier, a middle sheet of absorbent paper, and an outer sheet of high wet-strength, grease-resisting Patapar Vegetable Parchment, beautifully printed. The three sheets are bound together at one edge by adhesive to form a single, easy-to-handle unit.

Paterson "Trip-L-Wrap" gives utmost protection. Saves money and time by speeding up wrapping operations all down the line. And there's only one inventory to stock and check.

We'll furnish Paterson "Trip-L-Wraps" beautifully printed with your present wrapper design. Or, if you like, we'll create a new design for you. Write for samples and prices.

PATERSON PARCHMENT PAPER COMPANY

BRISTOL, PENNSYLVANIA

Headquarters for Genuine Vegetable Parchment Since 1885

WEST COAST PLANT: 340 Bryant Street, San Francisco 7, California

SALES OFFICES: 111 West Washington Street, Chicago 2, Illinois · 122 East 42nd Street, New York 17, New York

The ultimate of quality, care, craftsmanship ...go into *Rowell Boxes*

The creative art of the master pottery-maker finds its counterpart in the exacting skill Rowell devotes to making fine set-up boxes . . . a skill known by packagers everywhere.

E. N. Rowell Co. Inc.

Mfrs. Fine Paper Boxes
Batavia,
N. Y.

Greaseproof and Wet Strength a problem?

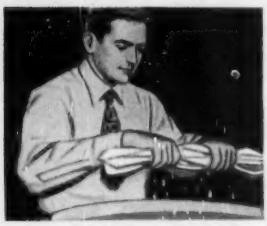
RHINELANDER

Has the Answer with.....

Wet strength, odor exclusion, moldability, and ease of handling all are factors desired in butter and oleo wraps. Aqua-Tuf offers all these plus low price. It's ideal, too, for many other dairy products.

Bulk ice cream benefits by the remarkable wet strength of Aqua-Tuf for liners and can covers. Makes for neater, better appearing packages . . . it's greaseproof, too, and ideal for ice cream bars.

Garden fresh . . . but will it stay that way? Aqua-Tuf will help maintain moisture . . . keep celery and other vegetables fresh and clean from farm to market. This requires wet-strength —and Aqua-Tuf's got it.



72 hours in boiling water and still it doesn't disintegrate—that's Aqua-Tuf —available in a wide range of glassine and greaseproof grades.

The beauty of Aqua-Tuf is that it makes available that very useful quality of wet strength along with the wide variety of paper characteristics offered by glassine and greaseproof papers—equaled nowhere in the paper world. Perhaps you have a packaging problem that requires moisture control, grease resistance, and wet-strength at a low price. We would like to tackle your problem. Why not let us know about it?

Write for free test samples today. Please state application.

RHINELANDER PAPER COMPANY

Rhinelander, Wisconsin

Every year *Acetate* Window Boxes sell more cranberries

10 years ago nearly all fresh cranberries were marketed in bulk. Today, all but 2 percent are prepackaged—in bags and window boxes, with window boxes fast becoming the favored method.

Shoppers like window boxes because they provide necessary visibility, yet keep contents protected . . . are easy to store in the home freezer.

Dealers like window boxes because they are easy to stock . . . make eye-catching mass displays . . . promote impulse buying.

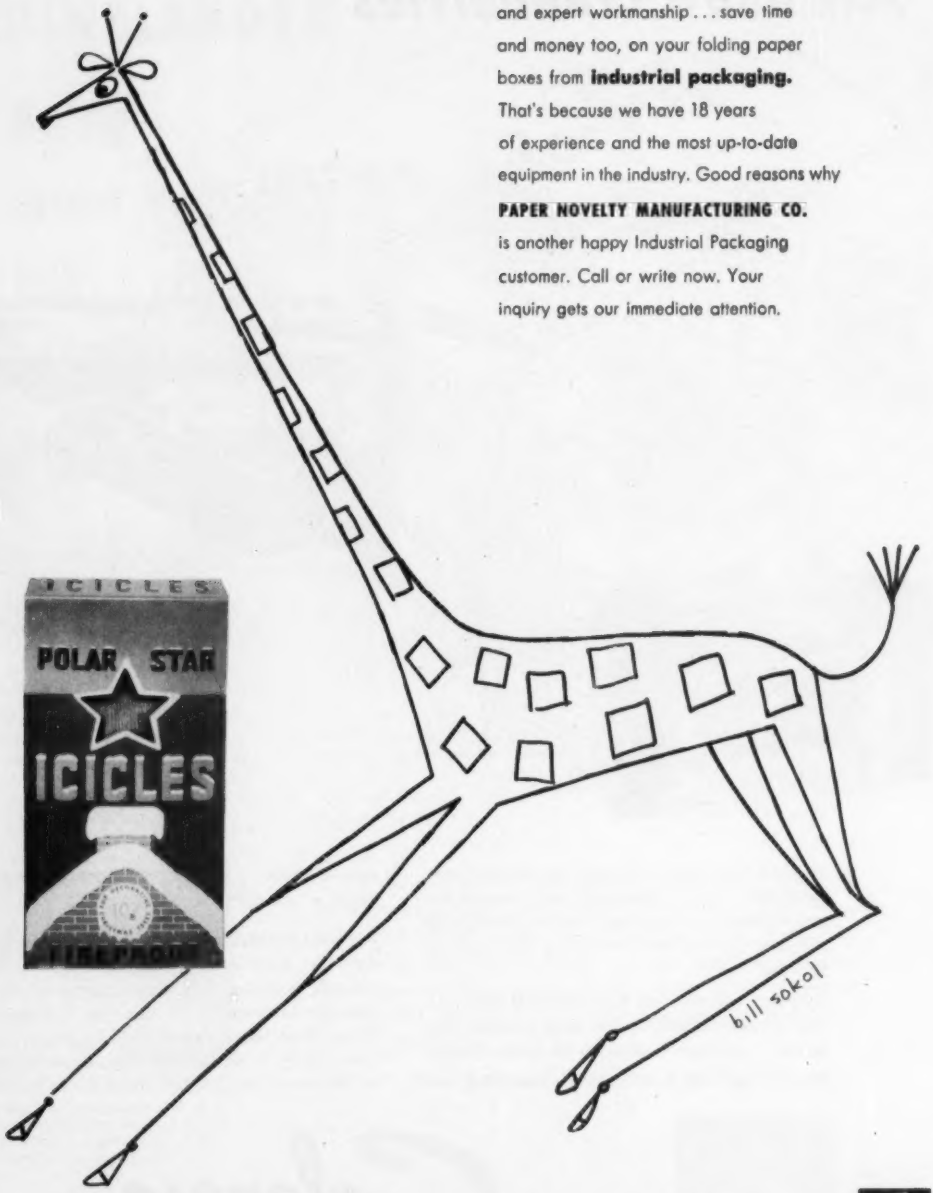
For sales-minded packaging, plan on the window box with *acetate*—the crystal-clear, flat-smooth, non-cockling, non-fogging window. Celanese Corporation of America, Transparent Films Dept. 108-J, 180 Madison Avenue, New York 16, N. Y. In Canada, Canadian Chemical & Cellulose Company, Ltd., Montreal & Toronto.

Celanese* Acetate TRANSPARENT FILM

*Reg. U. S. Pat. Off.

you get fast action...

and expert workmanship... save time and money too, on your folding paper boxes from **industrial packaging.** That's because we have 18 years of experience and the most up-to-date equipment in the industry. Good reasons why **PAPER NOVELTY MANUFACTURING CO.** is another happy Industrial Packaging customer. Call or write now. Your inquiry gets our immediate attention.



industrial packaging co., inc. *Manufacturers of Folding Paper Boxes*

1155 Manhattan Avenue, Brooklyn 22, New York • EVergreen 9-5560

Give Your Product a "BREATHER"

with New Heat Sealable

VISKON® nonwoven fabrics

...low-cost "breather" container for naphthalene crystals, chemicals, coffee, tea, spices, dried foods—many other products!

Now . . . amazing new **VISKON** for product packaging where porosity, product breathing, absorption, diffusion, infusion and wet strength are needed. Already proved successful in many applications. **VISKON** can help you speed production, cut costs and increase customer acceptance. **VISKON** can do the same for *your* product as well!

VISKON is made of tough rayon and cotton fibers bonded together with cellulose . . . with spectacular characteristics ideally suited for packaging. **VISKON** prints readily, is non-raveling, lint-free—odorless, tasteless, non-toxic and completely sanitary. It is furnished in mill rolls, tapes or sheets—in a large selection of grades and weights. Whatever *your* container problem, investigate low-cost **VISKON** *now* . . . mail coupon for complete information *today!*

VISKON® nonwoven fabrics

another product to fit today's needs by

THE VISKING CORPORATION
NORTH LITTLE ROCK, ARKANSAS

VISKON IS ECONOMICAL!

Costs less than popular woven materials—a fraction more than paper . . . yet matches or exceeds their performance!

VISKON IS HEAT SEALABLE!

Generally speaking, Viskon seals at between 350° and 500°F., corresponding with dwell time and jaw pressure.

VISKON IS STRONG AND DURABLE!

Holds its shape, yet is soft and flexible. Viskon has exceptionally high wet strength.

VISKON IS TASTELESS, ODOR-FREE!

Completely sanitary for use as a food container. Lint-free and non-raveling.

THE VISKING CORPORATION, Dept. MD
Box 76, North Little Rock, Ark.

Please rush complete information about **VISKON** for use as a product container.

Name..... *Position*.....

Company.....

Address.....

City..... *Zone*..... *State*.....

BOOST PRODUCTION

...with tailor-made Riegel papers

A few things RIEGEL can do for you . . .

- Keep products dry
- Keep products moist
- Retard rancidity
- Seal with heat or glue
- Provide wet strength
- Stop grease penetration
- Retain aromas, flavors
- Resist extreme cold
- Reduce breakage
- Prevent sifting
- Protect from light
- Resist alkalis
- Resist corrosion
- Boost machine efficiency

AN IMPORTANT FACTOR in production costs is the top speed at which your packaging machinery can operate . . . a factor that calls for close cooperation between packaging engineers, machinery engineers, and *paper* engineers. Over and over again, Riegel has helped boost production by providing tailor-made papers with just the right strength, sealing properties, easy formability, etc., plus closely controlled uniformity. Invariably the paper must also provide many of the protective functions listed at left. Whatever *your* packages may need, Riegel can develop the right papers . . . quickly, efficiently, economically. Write to *Riegel Paper Corporation, P.O. Box 170, Grand Central Station, New York 17, N. Y.*

Riegel FUNCTIONAL PAPERS FOR PROTECTIVE PACKAGING

- WRITE FOR SAMPLE BOOK

"a Milprint package will get YOUR product OUT FRONT!"

No retailer interested in profit will bury packages as appealing as these. He'll move them *out front* where they melt shopper resistance and make sales!

These are packages produced in rich looking, quality speaking Milprint rotogravure on cellophane . . . just one example of the wide selections of printing processes and packaging materials you get from Milprint.

Want to get *your* product displayed *out front?* Just call your local Milprint man.

Milprint Rotogravure Printed Cellophane Wrappers

This insert printed by Milprint, Inc. General offices: Milwaukee, Wis. Sales Offices in Principal Cities

Printed Cellophane, Pliofilm, Polyethylene, Acetate, Glassine, Foils, Folding Cartons, Bags, Lithographed Displays, Printed Promotional Material.

Milprint INC

PACKAGING MATERIALS

LITHOGRAPHY & PRINTING

thinking about the quality of your cartons?

"Scientific Packaging" at

EMPIRE BOX

assures Fine Quality... Low Cost!

Clear up! Get the lowdown on Empire's "scientific packaging" that takes the guesswork out of carton quality. At Empire Box, every phase of production is under the supervision of expert packaging engineers. For instance, in the modern, completely equipped laboratory, trained technicians guard carton quality . . . constantly seek to improve quality through the development of superior paperboards from our own mill.

The result of this great laboratory control — this ceaseless search for better cartons — is finer packaging quality — greater packaging economy for you.

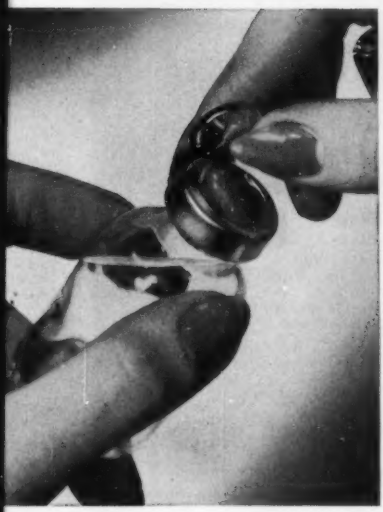
Call Empire Box when next you need folding cartons — you'll be on the track of top carton quality at the price you want to pay.

EMPIRE BOX
CORPORATION

FINE FOLDING CARTONS SINCE 1905

This attractive package is representative of the fine folding cartons Empire Box is producing for leaders in industry.

here's logical sealing... for injectables



first: An outer tear-off cap that assures laboratory-sealed freshness.

second: A cover cap that guards against superficial contamination.

third: An inner ferrule that prevents leakage, provides convenient access to sterile solutions.

Today, millions of Stericaps are guarding vital medical solutions. Made by Alcoa and used by leading pharmaceutical firms, they represent an important step toward safer, more efficient sealing.
For further information on the economy, application and availability of Stericaps and other Alcoa closures, call your local Alcoa sales office, listed under "Aluminum" in your classified phone directory, or write:

ALUMINUM COMPANY OF AMERICA
1705-K Gulf Building • Pittsburgh 19, Pennsylvania

"SEE IT NOW" with Edward R. Murrow — CBS-TV every Sunday . . . brings the world to your armchair. Consult your newspaper for local time and channel.

Waxed Paper helps sell these brands!

How waxed paper can help build *your* profits

STRONG BRAND IDENTIFICATION

You build sales when your packaging ties in with your *brand* advertising and promotion. Colorful waxed paper packaging makes *your brand* stand out on the shelf . . . gives you substantial packaging savings, too.

MAXIMUM DISPLAY VALUE

A basic family design on low-cost waxed paper packages ties your entire line together. You get strong display of *your brand* at the point-of-sale . . . and added volume from the money you spend to advertise your fastest moving items.

UNIFORM PRODUCT APPEARANCE

Waxed paper packaging builds consumer confidence . . . and *repeat* sales. For accurate product illustrations look uniformly fresh, flavorful, and appetizing always . . . give *your brand* proven sales appeal.

Successful food merchandising . . . is brand merchandising

WAXED PAPER INSTITUTE, INC., 38 S. DEARBORN ST., CHICAGO 3, ILL.

waxed paper protects freshness

SELL YOUR BRAND . . . WITH MODERN WAXED PAPER

Shoulder Decoration . . .

A NEW DIMENSION IN TUBE DESIGN BY WIRZ

OF PARTICULAR INTEREST TO LEAD TUBE USERS

This attractive Wirz tube brings new grace to Marie Earle products. The shoulder and cap—decorated in soft green—add elegance and sales appeal to the many features of Wirz Collapsible Metal Tubes. Decorated shoulders eliminate the unsightly appearance of plain lead tubes which comes with age, unfavorable atmospheric conditions, etc. Can also be used with aluminum or tin tubes.

ESTABLISHED 1838

A. H. WIRZ Inc.

New York 17, N. Y. 50 E. 42nd St. | Chicago 4, Ill. 80 E. Jackson Blvd. | Memphis 2, Tenn. Worzburg Bros. | Los Angeles 48, Calif. 435 S. La Cienega Blvd. | Havana, Cuba Roberto Ortiz & Son

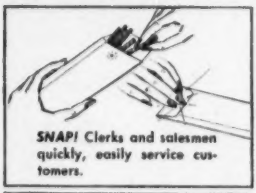
Export Division—772 Drexel Bldg., Philadelphia 6, Pa.

Collapsible Metal Tubes · Lacquer Linings · Wax Linings · Westite Closures · Soft Metal Tubing · Household Can Spouts · Applicator Pipes · Compression-Injection Molding

4th & Cole Streets, Chester, Pa.

IT'S A SNAP
TO REDUCE PACKAGING COSTS

Columbian® SNAP ENVELOPES AND FOLDERS



SNAP! Clerks and salesmen quickly, easily service customers.

SNAP! Inter-office mail is safely routed.

SNAP! Your product is handsomely packaged.

SNAP! Your sales message is ready for mailing.

NEWEST CLOSURE IDEA!

Inserting-closing time and costs are slashed with containers made with this new, handsome, wafer-thin closure that snaps open... snaps closed ... can be opened and closed again and again.

Columbian Snap envelopes and folders, custom-tailored to individual requirements, are used to advantage by some of the country's top firms.

Improve the appearance of your package, and cut costs by using this faster, more efficient closure on envelopes, folders, and other containers for

Inter-office mail ***Resale packaging***
Samples ***Handling and shipping of small parts***

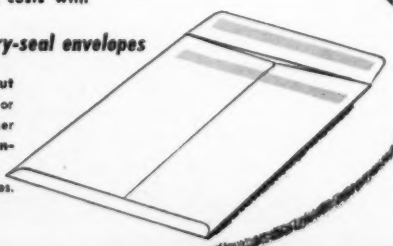
There are dozens of ways in which your firm can benefit from the use of Columbian SNAP envelopes and folders.

WRITE TODAY FOR FREE SAMPLES AND COMPLETE DETAILS.

—and here's another famous closure idea!

Reduce packaging costs with

SELF-SEAL®*—the dry-seal envelopes*



For a quick, sure seal **without moisture, staples, strings** or **clasps,** just press flaps together and the envelope is **permanently sealed.**

Ask for samples.

UNITED STATES ENVELOPE COMPANY
Springfield, Mass. • World's largest manufacturer of envelopes — 14 plants from coast to coast

metal foil's invisible partner...

It's good sense to wrap a product in foil—strong, pliable, attractive. Foods, drugs, chemicals, cosmetics—hundreds of items are kept safer, look better, sell faster in metal foil.

But metal foil by itself can't be heat-sealed. And it needs protection against abrasion, crinkling, split seams.

That's where a smooth, flexible, transparent coating based on VINYLITE Brand Resins helps metal foils. It heat-seals to form a strong, tight bond. It makes them tougher, stronger. It fills pinholes, gives surfaces a fine, clear gloss. Odorless, tasteless, non-contaminating, inert, it's an extra measure of safety.

Coatings based on VINYLITE Resins stick fast, stay flexible, won't crack or peel away—resist water, oils, greases, alkalies and most strong acids. They can be applied over printing or overprinted.

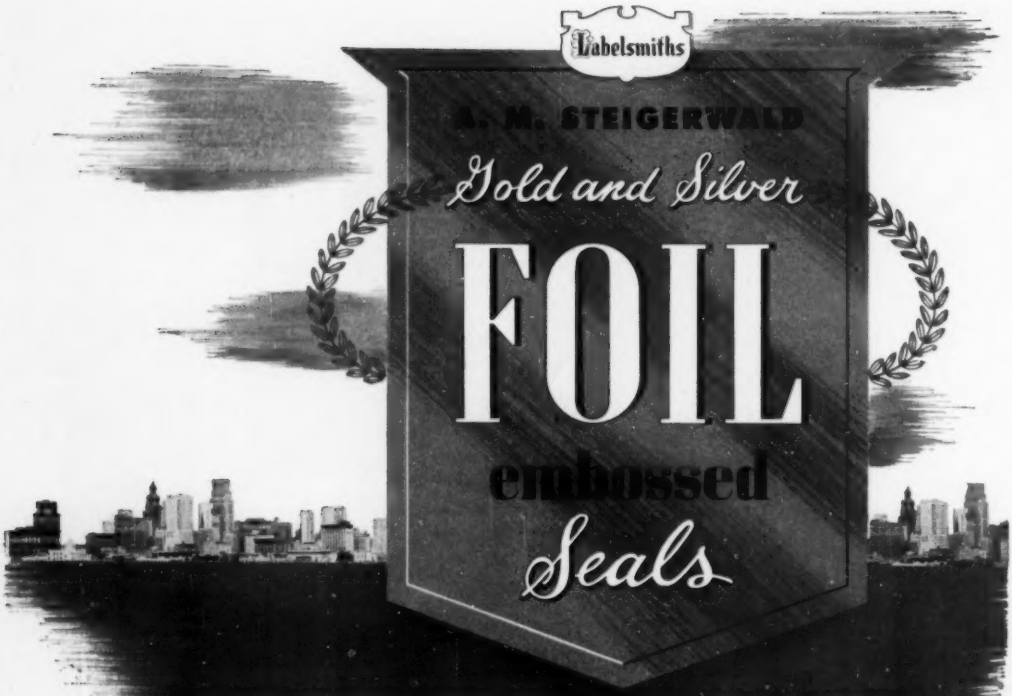
Similar coatings based on VINYLITE Brand Resins are available for other packaging materials, too—metal, paper, cloth. They have the qualities that make VINYLITE Brand Resins and Plastics so useful for scores of products throughout defense and basic industry.

To learn more about them, we suggest you write Dept. OA-55.

Data courtesy Shellmar Products Corporation, Mount Vernon, Ohio.

Vinylite BRAND
RESINS

TRADE MARK
BAKELITE COMPANY
A Division of
Union Carbide and Carbon Corporation
UCC
30 East 42nd Street, New York 17, N. Y.



HOW WOULD EMBOSSED FOIL SEALS LOOK?

The sketches we design give a perfect picture of how much beauty and dignity foil seals add to the products, anniversary, convention or similar events. How would embossed foil seals look? It's so easy to find out . . . FREE! with the coupon below.

IT'S EASY TO FIND OUT *FREE!*

How would foil seals look? On products, letterhead, labels, seals or booklet

Please send me a sketch on ☐ GOLD ☐ SILVER foil approx. size.....with the following copy

.....

.....

My Name.....

Company.....

Address.....City.....

Approx. Quantity.....

Designers and Producers of Fine Labels

Labelsmiths

*GUMMED or UNGUMMED • HEAT SEAL
PRESSURE SENSITIVE *ALL AT LOWEST PRICES*

a. m. steigerwald company

910 W. VAN BUREN ST., CHICAGO 7, ILL. TAYLOR 9-5400

The same offer is good for other types of Labels

CHARLOTTE, MICH.
L. M. Clark
612 So. Pleasant St.

CLEVELAND	DANVILLE, ILL.	LOUISVILLE	MEMPHIS	MINNEAPOLIS	NEW YORK, N. Y.	OAKLAND	ST. LOUIS
A. C. and J. S. Foster	F. F. Michaelsfelder	Jos Herrmann	Edward Magnes	J. E. and J. L. Moor	John N. McLaren	Jean S. Panton	Marvin Yates Company
510 Hippodrome Bldg.	1208 Sheridan St.	416 Jefferson St.	278 S. Front St.	3329 DePont Ave., So.	646 W. 125th St.	600 Sixteenth St.	Arcade Building
CHerry 1-2468	DAnville 4447J	WAbash 1257	MEmphis 8-2574	LOcust 5309	MOnument 2-0237	TEmplebar 2-1745	GArfield 0741

NEW WAYS

TO USE PAPER BAGS FOR BETTER PACKAGING

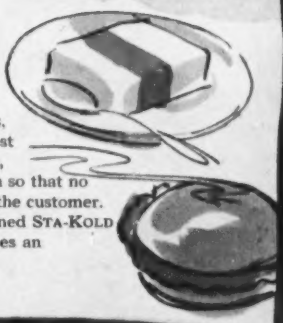
WATERPROOFING COMPOUND

Powdered Product Packaged in Multiwall

Coprox, highly successful powdered waterproof cement paint, reaches users in Union Multiwall Bags, in small units for the home handyman and large sacks for the construction industry. Bags provide all necessary protection, keep manufacturer's packaging costs down, give him large area for brand identification and instructions-for-use copy, are well suited to point-of-sale display.

HOT AND COLD PRODUCTS

STA-KOLD Insulated Bag Protects Foods, is Good Promotion Tool



Restaurants, delicatessens, food markets, drug stores have many uses for a low-cost container for warm or refrigerated foods, especially one that is economical enough so that no special charge has to be passed along to the customer. Union's newly improved creped, kraft-lined STA-KOLD bag fills the bill; attractively printed, does an advertising job as well. Ask for samples.

PEELED POTATOES

Restaurant Item Travels in Paper

With kitchen labor costs still on the rise, popularity of pre-peeled potatoes for restaurant and institutional use is mounting steadily. Colony Food Products, Inc. of Medford, Mass., is among processors who find Union Multiwall Bags most satisfactory for delivery. Sanitary, one-trip sacks protect spud quality, simplify plant handling, are welcomed by customers.

PAINT

PIKUP Bags are Convenient Carriers for Heavy Gallon Cans

Consumers, especially women, can find a gallon can of paint too heavy for comfort. Enterprising paint manufacturers now provide retail outlets with Union's sturdy kraft PIKUP bag, with reinforced paper handles. Bag helps retailer increase unit of sale, carries manufacturer's name and sales copy on the outside. Doubly welcome while government restricts metal handles on cans.

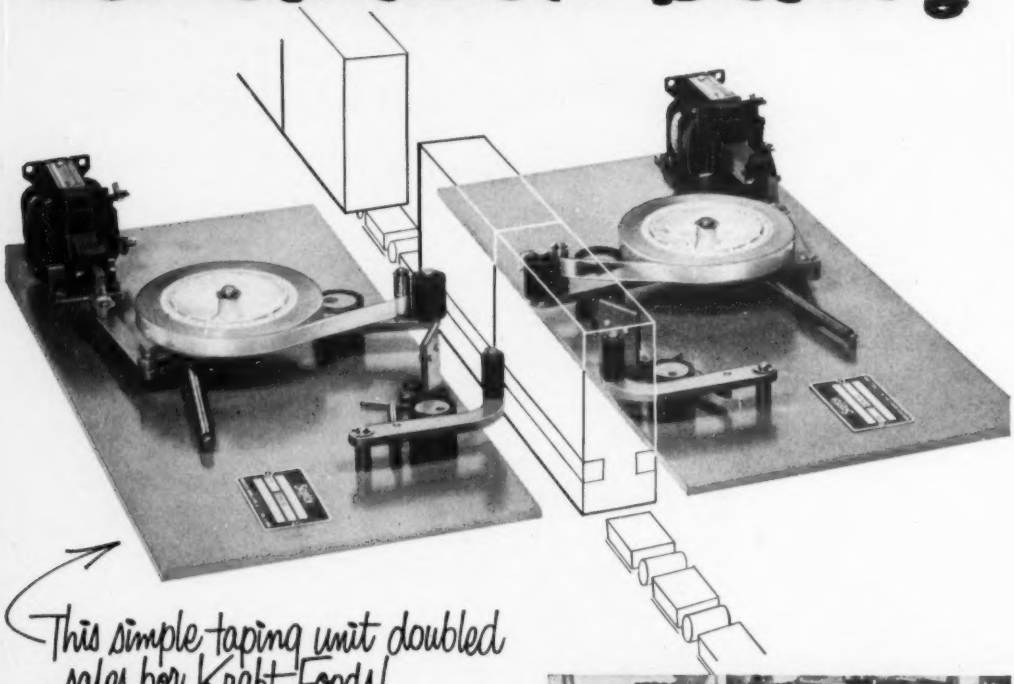
Odds are, your most efficient low-cost packaging medium can be a paper bag.

TRADE MARK UNION

UNION BAG & PAPER CORPORATION

WOOLWORTH BUILDING • NEW YORK 7, NEW YORK

Combination Deals?



This simple taping unit doubled sales for Kraft Foods!

Here's a fast, simple way to create a securely banded combination deal that's all ready for the retailer's shelves . . . a deal that makes a hit with retailers and customers alike!

This "Scotch" Brand Combination Package Sealer bands any combination of boxes, jars or bottles . . . applies tight-sticking strips of tape to form the items into an easily handled, attractive unit.

For this Parkay Margarine deal, twin units of the Sealer applied matching strips of "Scotch" Cellophane Tape automatically as the deal moved by on a conveyor mechanism.

Tape does it quicker, better, cheaper!

3M SERVICE REPRESENTATIVES worked closely with engineers of Kraft Foods Company in designing this semi-automatic assembly line that cut costs 50%. Why not let them work on your problem, too? The "Scotch" Brand line includes the world's largest selection of tapes and taping machinery, plus facilities for the design and manufacture of specialized installations. Write Dept. MP-102, 3M Co., St. Paul 6, Minn., and a representative will call promptly.

SCOTCH BRAND Pressure-Sensitive Tapes

3M

The term "Scotch" and the plaid design are registered trademarks for the more than 200 pressure-sensitive adhesive tapes made in U.S.A. by Minnesota Mining & Mfg. Co., St. Paul 6, Minn.—also makers of "Scotch" Sound Recording Tape, "Underseal" Rubberized Coating, "Scotchlite" Reflective Sheeting, "Safety-Walk" Non-slip Surfacing, "3M" Abrasives, "3M" Adhesives. General Export: 122 E. 42nd St., New York 17, N. Y. In Canada: London, Ont., Can.

Daniel Webster

DANIEL WEBSTER on the safety of the nation

Nothing will ruin the country
if the people themselves will
undertake its safety;
and nothing can save it
if they leave that safety in
any hands but their own.

(Speech, U. S. Senate, March, 1834)

Artist: Lewis Daniel

CONTAINER CORPORATION OF AMERICA Great Ideas of Western Man . . . ONE OF A SERIES

More Sales are "in the bag"

when you use NASHUA packaging!

The day of Impulse Purchasing is here. It's not just a trend. Consider potato chips, for example. A recent study shows that *65.4% of the purchases are made on impulse.*

Capitalize on this trend by making use of Nashua's experience with Printed Cellophane and Polyethylene. Whether you need beautifully printed sheets, or bags made to your specifications, a call to Nashua is a good idea.

We'll even design a new Impulse Package for you, if you wish.

NASHUA CORPORATION

NASHUA, NEW HAMPSHIRE

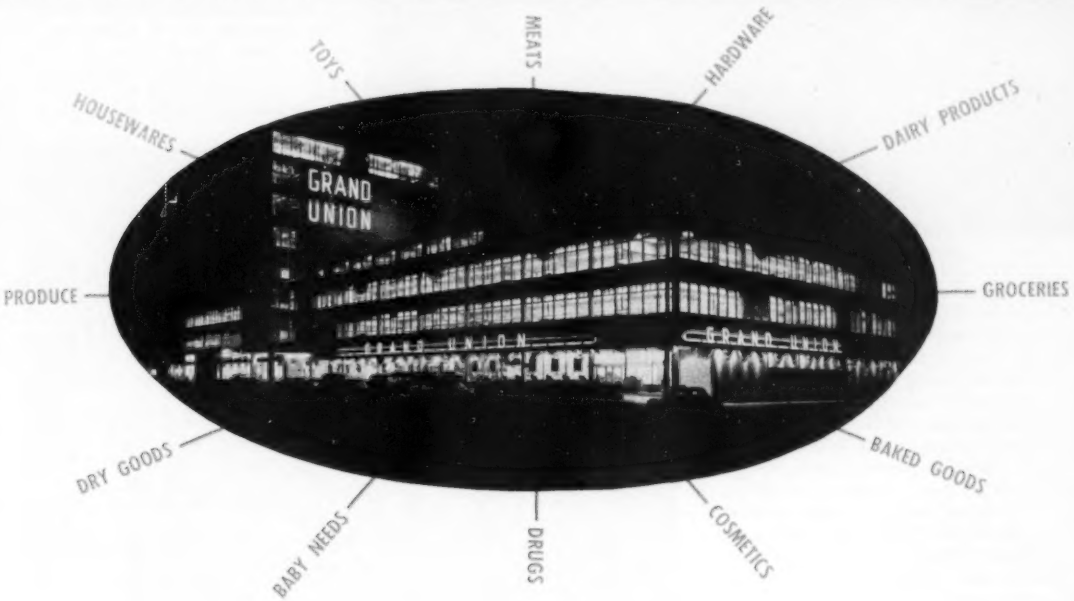
formerly Nashua Gummed and Coated Paper Company

CREATIVE PACKAGING HEADQUARTERS

PRINTED FILM • WAXED WRAPPERS • BOX PAPERS • BOX STAYS
GUMMED PAPERS • HEAT SEAL PAPERS • FLOCKED PRODUCTS
PARTY PAPERS • PRINTED BANDS • CORRUGATOR'S TAPE • SEALING TAPE • MOISTENING MACHINES • TECHNICAL PAPER PRODUCTS

VOLUME 26
NUMBER 2
OCTOBER 1952

Modern packaging



Back to the general store

WITH THE SUPERMARKET-THAT-SELLS-EVERYTHING, AMERICAN MERCHANDISING HAS COME FULL CIRCLE—BUT THIS TIME IT'S PACKAGING THAT MUST CARRY THE LOAD. HERE'S HOW.

In a few abandoned warehouses and old garages, a handful of bold venturers in the food business set out, around 1932, to lick the depression and the chain stores by selling foods in these barny structures on a self-service, cash-and-carry, big-volume, rock-bottom-price basis. For this kind of store, somebody invented the word "supermarket."

The public, in its jalopies, drove from miles around to take advantage of bargains and the convenient parking lots usually adjacent to these makeshift quarters. Skeptics said the idea was a depression baby. Chains and independents tried to buck the tide.

But the public kept on coming, not only in jalopies, but in Cadillacs. The supermarket became every man's market, not only because it suited the peoples' pocketbooks, but because it suited their motorized living. America's housewives could get in their cars, shop anywhere and carry home as much as they liked on one trip.

The drafty, barn-like structures are disappearing. In their place are looming out of the landscape in all parts of the country elaborate permanent layouts that look like festive exposition grounds and rival the United Nations buildings in modern architectural design and sleek interior decor, with air conditioning, lunch counters,

SLEEK INTERIORS are departmentalized and designated with permanent signs for pleasing appearance, leaving little room for point-of-sale material. The package today must be relied upon to do the entire selling job.

HUSBANDS are becoming frequent shoppers for the weekly stock-up. Grand Union has a "Man's Corner" in its new East Paterson, N. J., store that features wines, tobaccos, golf balls, work gloves, toiletries, shirts, etc.

PHOTOS COURTESY KELLY & GRUZEN, ARCHITECTS.

music and even conveyor systems that will carry your purchases right to the parking lot for pick-up as you drive out. A striking example is the Grand Union's Elmwood Shopping Center at East Paterson, N. J., designed by the architectural firm of Kelly & Gruzen.

Without question, the packaged unit has been the strongest single factor in the successful development of supermarket growth. And now, as the supermarket comes of age, perhaps it's time to take a new look at what this new form of retailing is doing to the package.

According to *Super Market Merchandising*, the number of supermarkets has increased from a total of 9,575 at the end of 1946 to 15,383 at the end of 1951 and annual sales have nearly tripled, from an annual rate of $4.5 billion in 1945 to $12.3 billion in 1951.

The supermarket is a modern composite of practically every type of retailing that has preceded it. It is the crossroads market. It is the general store reincarnated in modern form—the one-stop shopping center with everything under one roof. And now it appears to be encroaching on the province which the department store has dominated since the turn of the century.

The supermarket makes use of all the selling techniques of its pioneering predecessors: the self-service idea the Piggly Wiggly originated in 1919, the self-selection techniques of the 5-and-10s, and the cost-cutting features of the "pineboard" cut-rate drug store. And its effect is seen in the universal acceptance of self-service methods now adopted by practically every retail outlet on Main Street.[1] Even the 5-and-10s have started experimenting with supermarket fixtures and check-out counters replacing their clerk-served counter layouts. Woolworth opened its first supermarket check-out operation in its Stuyvesant Town store in New York City in August.

In its own right, today's supermarket is a grocery store, meat market, fruit and vegetable market, bakery shop and dairy-products distributor. It has been successfully adding housewares, drugs and hardware. Now as it extends itself beyond the realm of food items, it is selling toys, stationery, magazines, paper specialties, fresh flowers and plants, household textiles, baby goods, hosiery, handkerchiefs, lingerie, footwear, sportswear—even dresses.

Only five years ago dentifrice manufacturers were debating the advisability of promoting the sale of

PARDON OUR PAPER

We regret that due to a strike that is tying up shipments from our regular supplier, the quality of the paper used in this issue is not up to our usual standard. We shall return to our regular weight of coated stock with the next issue, or as soon thereafter as possible.

[1] See "Mass Market Packaging," MODERN PACKAGING, April, 1950, p. 115.

tooth paste through supermarkets. Today the drug industry reports that about 60% of all dentifrices are sold through food stores. Six years ago it was only 15%.

How far this trend will go is unpredictable, of course. But one thing is certain: Future success, as well as past, is inevitably linked to packaging and to the kind of packaging methods manufacturers devise to meet the supermarket's self-service requirements. Suffice to say that, at the moment, one of the biggest single activities in package-design studios throughout the country is the redesign of packages for big-name drugs and toiletries to give them the kind of shelf display required for supermarket selling.

From the beginning the packaged unit gave the early supermarket operators their start. Mass-produced packages kept merchandise clean and protected from factory to user, permitted the manufacturer to label them with his brand guarantee, were easy for the retailer to handle and inventory, and were convenient for the customer to select and to buy merely by handing her money over a check-out counter.

Over the last 20 years the producers of soups, soaps and breakfast foods have continually been learning new tricks of package design to make their products better self-salesmen in the supermarket arena. Now the makers of drugs, hardware, soft goods and dozens of other non-food lines are suddenly finding that they must adopt the same packaging tricks—and quickly, if they are not to miss the boat.

Perhaps this mushrooming trend to the all-inclusive supermarket has been spurred by the recent demonstration that even meats[2] and produce—once considered to be outside that realm—will sell better and faster when packaged for self service. But the perishable foods represent a packaging problem quite different from that of the supermarkets' newer staple lines. In the one case it's a matter of handling and protection rather than design and—for the time being at least—it's the supermarket's own headache. In the latter case it's strictly a design problem and strictly up to the manufacturer if he expects his breakfast food or tooth paste to compete with other brands on the supers' shelves.

This story, then, is concerned with the new design problems that are being thrown into the laps of the manufacturers.

Behind the supermarket operation is the whole new concept of the impulse package to attract the shopper's eye and to make her buy the unplanned purchase and the visibility package using transparent film to let the customer see what she is buying.

All of these principles are so well known they are almost routine in successful merchandising today. But the impact of the supermarket in the last few years is sharpening these demands on the package for three essential reasons:

1. Competition is becoming keener. A package that has not kept step with the times cannot hold its own on the shelves with those that are geared to supermarket shopping habits.

2. New types of departmentalized and glamourized interiors provide little opportunity for point-of-sale display material. This places a new load on the package to do the whole selling job.

3. The growing list of non-food items handled by the supers demands not only redesigning of packages to meet these new requirements, such as is being done in the drug field, but an entirely new conception of packaging for soft goods, housewares and hardware.

Never in the history of packaging have there been so many new designs. MODERN PACKAGING is swamped with

[2] See "Meat Today," MODERN PACKAGING, August, 1952, p. 85.

PACKAGE DESIGN, GORDON SALISBURY.

INFLUENCE of lengthwise positioning of tooth paste on supermarket shelves is strikingly indicated by stepped-up identity for Ipana on three sides of the redesigned carton.

BIG-NAME TOILETRIES packages are being given face-lifting treatments as manufacturers are finding out that they must adopt the same packaging tricks as the food manufacturers to meet the supers' requirements.

TWO POWERS MODELS pictured on new Kreml package tie in the package with the company's advertising, take the place of point-of-sale display pieces in outlets where display space is limited.

reports of hundreds of them every month. Designers say they are up to their ears in work. Famous old trademarks are being revamped, simplified or strengthened. New illustrative techniques are being tried and new design devices adopted to give quicker recognition and greater flexibility.

A color photograph of a cake for a ready-mix package, the shade of green for the background of a soap carton, the slant of a type face have become subjects for top-executive conferences. Because of the supermarket, no package can be taken lightly today. Any change, however simple, means a decision with thousands, perhaps millions, of dollars at stake.

Brand preferences

In this new type of modern retailing, nobody stands between the customer and the product, and this fact tends to make the supers favor the advertised brands. Private brands were a tool of the chains to permit price cutting and even the chains today are leaning toward the advertised brands. A & P, one of the leaders in private-brand merchandising, is reported to have only 30 private-labeled lines among the hundreds carried in the average store.

CLEAR DISTINCTIONS must be made between the packages for two similar products to prevent wrong purchases. New emphasis on "Soap Filled Pads" which dominates the face of the package at right leaves no doubt in shopper's mind which of the two products she is buying. With the old package she was carrying home scouring pads when she wanted soap pads.

PACKAGE DESIGN, JUNE MARK

This heavy reliance on brand, therefore, makes it essential for the makers of the leaders to have close tie-ins with advertising and instant recognition for their packages at the point of sale. Sometimes this is referred to as "pre-selling." Any number of recent redesigns with this objective may be pointed out. The new triangular trademark device now appearing on all Nabisco packages is an example.[3] Canada Dry redesigned all its labels with a similar purpose in mind. In the dairy field the new color-coordinated packages for Sealtest products[4] and the new Elsie daisy symbol appearing on all Borden products are other examples. The rash of redesigning that is being done by local dairy firms is also an indication of the same trend—to hold local brand positions against the nationally known names.

The significant effect of the supermarket on package design is seen in the comprehensive relabeling program of the H. J. Heinz Co., now nearing completion.[5] The famous Heinz keystone trademark, in continual consumer tests, has almost 100% recognizability, but the company changed recently to a smaller, simplified keystone, still there on every package, but providing a design device that permits Heinz more flexibility to use the rest of the package surface to give greater emphasis to

[3] See "Nabisco's Seal of Recognition," MODERN PACKAGING, May, 1952, p. 115.
[4] See "Sealtest Ice Cream, MODERN PACKAGING, Aug., 1952, p. 102, and "Color for Dairy Goods," MODERN PACKAGING, Sept., 1951, p. 82.
[5] See "Heinz Steps Out," MODERN PACKAGING, Sept., 1952, p. 106.

product names and—for the first time in Heinz history—product illustration where needed, as in the case of the company's fruit jellies.

Another noteworthy trend—and an important one—is found in the new Kellogg cereal packages.[6] These new packages, with a format "like a magazine cover," are designed for constant brand identity, but so that the remainder of the surface may be varied to incorporate illustrative treatments not only such as appetite appeal of the cereals with berries and fruits in season and tie-ins with TV and radio characters in company-sponsored programs, but tie-ins with timely events of interest to the nation. During October Kellogg's packages are being used for a "get-out-the-vote" campaign. "Newsy as a morning newspaper" is the promotional slant of these new packages and the "get-out-the-vote" packages are the first major example of this usage. This technique and similar treatments will gain favor—not only because the trend is toward the pictorial and away from the poster type of design, but because packages must do the point-of-sale selling job alone.

Departments in the newer supermarkets are designated with permanent signs, similar to present department-store practice to give an over-all pleasing appearance. There is precious little space allowed for manufacturer's display material.

Health and beauty aids

This has been discovered quickly by makers of drugs and toiletries now

[6] See "Magazine Cover Cartons," MODERN PACKAGING, April, 1952, p. 86.

GET-OUT-THE-VOTE packages for Kellogg's Corn Flakes illustrate the new approach to packages with a format "like a magazine cover" to establish permanent identity, but which can be frequently changed to carry timely messages. Currently, pictures of the two presidential candidates are printed on the carton along with good-citizenship information urging all shoppers to register and vote in the November elections.

RADIANT AND WESTON'S PACKAGE DESIGNS, ALAN BERNI & ASSOCIATES, INC.

FLAVOR AND TASTE appeal are essential to catch the impulse shopper when making her selection. Strong emphasis on product designation and illustration is indicated by these new Weston's packages, while strong trademark device gives immediate brand and family identity of item.

IN A FLASH, shopper can select right mop with these new illustrated packages for Radiant Floor Mops. In the self-service supermarket, the blind and inarticulate package is sorely handicapped.

CARTON PRINTING, LASSITER PRESS, INC.

MANUFACTURER'S guarantee must be incorporated on all soft-goods packages. Supermarket operators cannot take over this responsibility. Customer must be told on package where she can return it if she is not satisfied.

stocked by the supers in ever-increasing volume. Health and beauty aids sold in large volume in supermarkets include everything from tooth paste to shampoos, cold remedies, hair nets, deodorants and razor blades. Ten years ago only 35% of the supermarkets carried these goods. Today 85% stock them and 90% of the 1,166 new supermarkets built last year installed sections for such products. It is predicted that in the next two years some 50,000 food stores will add health and beauty aids to their stocks. Last year supermarkets accounted for 8.5% of total sales of these products, in comparison with 4% sold in 1949.

Typical of current redesign is the new package for Kreml Shampoo, stepped up for self-service selling in both new and old outlets by the J. B. Williams Co., Glastonbury, Conn. With this new package the company aims directly at women shoppers; a survey revealed that 80% of the shampoo purchasers are women. The package features full-color illustrations of two Powers models on front and back panels, showing visually the results with the use of the product, a testimonial to its value, plus a message on the side panel from John Robert Powers, director of the model agency. The copy is brief and the colors are feminine. The result is a package that is an attractive point-of-sale advertising piece in itself with the benefit of a tie-in of the two Powers models who are now appearing in Kreml advertising.

A few years ago such pictorial treatment on a carton might not have been considered because it would too soon become "dated." Today there seems to be a growing regard for package design that is capable of frequent change—with a strong, basic, continuing device to maintain recognition, but with ample areas for introducing new elements of timely interest. This approach is based on the theory that if the supermarket is eliminating the opportunity for point-of-sale display pieces, then the timely display element must be transferred to the package.

The different manner in which the supermarket positions toiletries on its shelves frequently makes package revision a must. Illustrated with this article is a photograph of old and new Ipana tooth-paste cartons. This change was made soon after Bristol-Myers introduced Ipana in the supers. The red and yellow identifying chevrons are still there, but the small oval for the brand name has been replaced with a large plain yellow panel for printing the name Ipana in big sans serif letters extending nearly half the length of the carton on three sides, giving the brand name maximum display when placed lengthwise on supermarket shelves. Such design was not necessary in drug stores, where tooth-paste cartons are usually placed on the shelf with only the end panels showing.

PHOTO COURTESY E. I. DU PONT DE NEMOURS & CO., INC.

FRESH MEATS and produce that sell better and faster when packaged for self service perhaps have spurred the mushrooming trend to the all-inclusive supers.

Soft goods

A whole new technique of packaging is developing to sell soft goods in supermarkets.[7] While some of these outlets have display tables of the type used in variety stores, the majority of the supers prefer to have soft goods packaged. To some manufacturers this means packaging for the first time. To others it means a specialized type of packaging for the self-service store. In both cases it involves packaging procedure:

1. To protect merchandise from the beating it must take through constant, unsupervised handling in self selection.

2. To differentiate the merchandise for supers from the lines that are sold to department stores. (Many manufacturers fear losing their department-store accounts if they sell to the supers.)

3. To provide information concerning size and quality which must be told adequately but briefly on the package.

4. To incorporate the manufacturer's guarantee. (Supermarket operators cannot take over this responsibility; the customer must be informed in or on the package that if she is not satisfied with the quality of the product she can return it to the manufacturer for replacement or a refund.)

5. To include a spot somewhere on the package so that the price mark may be written legibly on the package or film wrap where it can be seen readily at the check-out counter.

(*This article continued on page 205*)

[7] See "Help-Yourself Textiles," MODERN PACKAGING, July, 1952, p. 77.

PHOTO COURTESY MILPRINT, INC.

JUST HEAT AND EAT is powerful sales appeal of Fiesta Franks. After only seven minutes in boiling water, the Pliofilm pouch is snipped open with scissors and the wieners with the barbecue sauce are ready to eat.

Packaged barbecue

FRANKFURTERS WITH SAUCE IN A TRANSPARENT POUCH OFFER CONVENIENCE OF QUICK, TASTY MEAL SERVICE

A number of meat packers and sausage manufacturers looking for ways to put new lift into sales of such favored foods as frankfurters have recently started packaging these items with barbecue sauce in heat-sealed transparent film pouches, falling in line with a trend toward such packaging of many liquid-content food products.*

The units—prepared simply by placing unopened pouches in boiling water for seven minutes—have caught on well with today's hurried housewives.

A typical firm, the Sugardale Provision Co. of Canton, Ohio, backed its new "Fiesta Franks" with a good advertising program and now reports a profitable hit with the public. This company confines its Fiesta Franks operation to a 75-mile radius of the Sugardale plant where delivery can be made directly, thereby making sure that the products reach consumers at their fresh and flavorful best.

This type of packaging eliminates the kitchen fuss usually necessary for a barbecued food and even dishwashing is reduced, since the product stays in the transparent film pouch until it reaches the serving plate.

The bright red, yellow and blue package design for Fiesta Franks is a point-of-sale stimulant in refrigerated cases and yet it does not obstruct the buyer's view of the product. Advertising carries out the festive "South of the Border" note and the simple preparation is a natural for television demonstration.

In packaging Fiesta Franks, six skinless franks are placed in a pouch and the pouch is passed along to an operator who adds the sauce. This operator places the pouch on a check-weight scale in an upright position and pours in the sauce until the package reaches the proper weight. Then the pouch is passed along to an operator who heat seals th open side. The Sugardale pouch weighs 12 oz. with the sauce and it measures 5¾ by 7¼ in.

The heat-sealed pouches are then packed flat in a corrugated shipping container, two stacks of four each, side by side, with a light piece of paper between each layer. Special techniques worked out by the pouch supplier in filling and packing protect the packages against breakage.

The sauce, a special blend for use in Pliofilm pouches, acts as a stabilizing agent, extending the shelf life of the complete package, but contains no artificial color or preservatives and thereby meets all food standards.

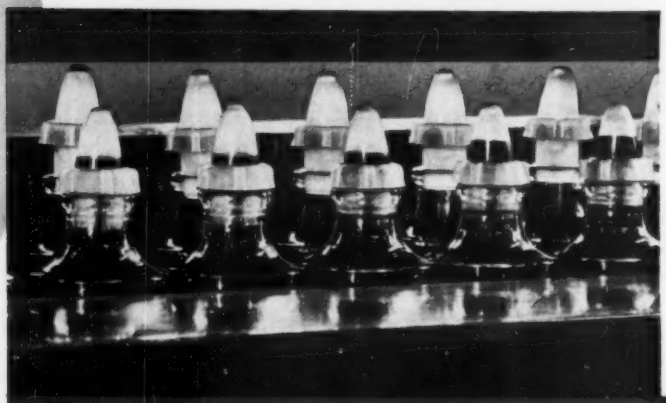
CREDITS: *Printed pouch made by Milprint, Inc., 4200 N. Holton St., Milwaukee 1, Wis., using Pliofilm supplied by The Goodyear Tire & Rubber Co., Akron, Ohio.*

SALES PROMOTION for the colorful red, yellow and blue printed Pliofilm packages for Fiesta Franks has a gay, colorful, south-of-the-border touch.

* See "Liquids in Film," MODERN PACKAGING, March, 1952, p. 196.

COLOR VISIBILITY of product through translucent stopper gives Higgins a new merchandising advantage, is a decided convenience to artists in selecting colors without referring to label.

AIR PRESSURE inside bottles always drives some ink up into the translucent stoppers when they are driven home by the corking bridge. Back row shows manually placed stoppers before the corking bridge has descended. The stopper skirt beneath friction ring and curved inside neck of bottle encourage ease of this operation.



Color-identity

By the use of a new polyethylene stopper and specially designed polystyrene pipette, The Higgins Ink Co., Inc., has added another striking improvement to the many package convenience features which over a period of more than 70 years have won such wide acceptance for Higgins famous drawing inks.

Because of the translucency of the material and construction which allows a reservoir of ink to be drawn up into the stopper itself, the new steeple-topped stopper permits each ink color to identify itself. It solves a problem which Higgins has been studying for years to match the stoppers to the colors of the inks in the bottles. By conventional methods this would have required an inventory of 19 different-colored stoppers besides difficult color control to obtain an exact match in each case. An even better effect is now achieved by one plain polyethylene stopper interchangeable on all bottles through which the user sees the actual color of the ink in the container. This color visibility is aided by the exchange of air pressure in the bottles which always forces some of the ink up into the hollow, translucent steeple top when the stoppers are driven home by the corking bridge.

These new color-identity dropper stoppers represent the latest step in Higgins' long-range objectives for continual improvement of dispensing devices which began when Charles M. Higgins followed the introduction of a handy tip-resistant bottle shortly after 1880 with his familiar steeple-topped stopper that quickly won favor among artists and draftsmen because it could be easily grasped by thumb and forefinger for filling ruling pens and lettering instruments. The history is interesting.

The original stopper was equipped with a quill made from a goose feather trimmed to hold just one drop of ink. The stopper was so weighted that it rested with the point of the quill turned up, thus preventing blots. Through the years Mr. Higgins' basic ideas have never been superseded, but new uses for drawing inks and new substances of which the stopper might be made have brought about steady improvements, some of them the result of war shortages; others, due to the adaptation of entirely new types of materials.

In the beginning Mr. Higgins designed a machine for producing the steeple tops and devised his own formula for the composition into which the already-assembled quills and corks were inserted during the molding process. This machine produced the entire output of cork stoppers used by the Higgins Ink Co. from the latter years of the 19th century until World War I caused shortages of imported materials.

With the occupation of Northern France by the Germans, adequate supplies of genuine goose quills became almost unobtainable. At the same time imports of cork from Portugal were almost cut off by submarine warfare.

Since necessity is the mother of invention, Mr. Higgins designed a stopper to be made of two parts of rubber vulcanized together. The stopper portion was made of relatively resilient stock with the steeple top of harder material. In this stopper there was inserted a quill made of cellulose nitrate and held in place by friction. The quill consisted of a flat piece of material curled on a hot-

plate. This assembly proved more costly than the traditional cork-and-feather-quill stopper with composition top and for certain other reasons was also less satisfactory. As soon as the war was over it was abandoned.

Try-outs of various types of synthetic quills made from several different plastic materials, all of which were cemented in the natural wood corks, continued. Nothing proved completely satisfactory, however, until polystyrene became available. In the meantime, a need became apparent for a dependable dispenser for filling instruments such as the LeRoy and Wrico lettering pens which took a larger drink than a single drop.

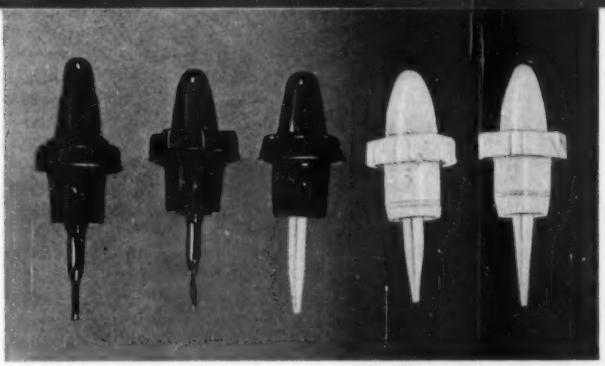
Tracy Higgins, who had succeeded to the head of the Higgins company after the death of his father, Charles M., in 1929, helped to devise and patent a new version of the rubber stopper with the steeple top hollowed out to form a bulb and with a pipette of plastic material substituted for the quill. This is reported to be one of the first known examples of the substitution of a nonshatterable plastic pipette for a glass dropper.

In 1937 a complete redesign of the Higgins packages won an award in a MODERN PACKAGING All-America Package Competition.* One of the features of the redesigned drawing-ink bottle at that time was a concave shoulder to make it a one-handed bottle when used as demonstrated in the illustration. (When the stopper was loosened it could easily be removed with one hand for filling the ruling pen.) A feature of this improved stopper, suggested by consumers, included shoulder ridges to encourage removal by turning and also to discourage rolling when the stopper was laid down. Subsequently, there was added a thumb rest on the steeple, by means of which a right-handed man could always bring the quill conveniently upright. This innovation was also the result of a user's suggestion.

The improvement of the stopper was re-approached in 1942 by Bert Cholet, now Higgins sales promotion

* See "All-America Package Competition." MODERN PACKAGING, March, 1938, p. 156 and p. 190.

dropper stoppers

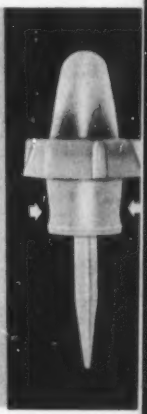


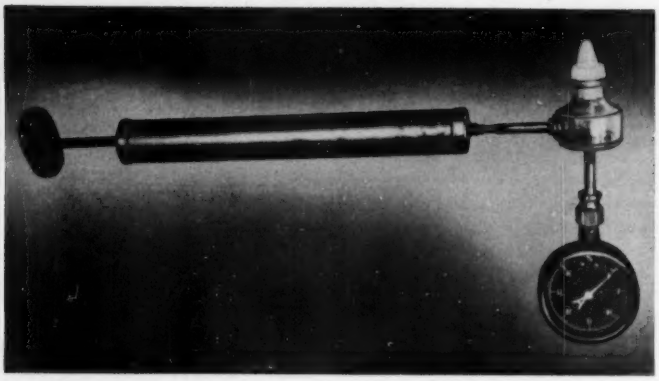
TRANSLUCENT POLYETHYLENE STOPPER, WITH POLYSTYRENE PIPETTE, MAKES EACH COLOR OF INK IDENTIFY ITSELF

EVOLUTION of Higgins' steeple-top stopper. Left to right: (1) original stopper devised by Tracy Higgins jointly with supplier; (2) improved stopper to conform with redesigned bottle in 1937; (3) further improvement was first polystyrene pipette; (4) first two-piece polyethylene stopper and pipette; (5) the new and perfected one-piece seamless stopper and pipette in sample form.

CROSS SECTION of Higgins ¾-oz. drawing-ink bottle with polyethylene stopper in place. Excellent corkage is afforded the bottle by opportunity for mushrooming of cork.

FATIGUE increases the efficiency of corkage. This polyethylene stopper has been in a Higgins bottle for two years.





CORKAGE TEST apparatus devised by Higgins. Slippery soap-treated stoppers are subjected to pressure until they pop. Perfected polyethylene stoppers will not pop under pressures of 35 lbs. These tests were important to prevent re-inserted corks from working out of bottle, for ease of insertion and extraction, and to eliminate work-out in production.

manager. A modified design of the synthetic quill applicator used in the cork-and-quill stopper was first undertaken. To arrive at the most efficient inside and outside angles for the Higgins quill, Mr. Cholet made numerous V-shaped grooves in the block of polystyrene and deposited ink in these grooves.

He found that a groove of a definite angle and depth held the highest vertical column of ink because of surface tension and capillary action. The outside angle or keel of the stopper was different from the inside angle and was designed to encourage the ink to bleed off the keel of the quill upon extraction, thereby making it dripless. The fact that the quill was curved away and up from the user's hand promoted a scoop effect and also discouraged dripping. The net result was a quill stopper which gently would deposit a single drop of ink in a draftsman's pen with a minimum danger of accident.

Following the success of the improved steeple-topped cork stopper and the adoption of the curved plastic quill, the Higgins Ink Co. decided to match the top of their rubber stopper to their cork stopper and also substituted polystyrene for the plastic from which the pipettes had previously been made.

At this juncture, war intervened again, but with an effect opposite to that of the first World War. In the former emergency rubber was adopted as a substitute for cork, but during World War II the occupation of the Far East by the Japanese precluded the use of rubber for ink stoppers so that cork-and-quill stoppers were again used exclusively.

Early in the second World War Mr. Cholet was experimenting with polyethylene and had become convinced that it was an ideal substance for the Higgins stopper of the future. The prolongation of the war and its resulting shortages, however, delayed development. At the end of the war the company contacted a supplier who was able to design and supply a two-piece welded stopper which would permit Higgins to use the same pipette employed in their rubber stopper. This was a necessity because many materials, particularly polyethylene, still were not plentiful and the company had to have the stopper parts sufficiently versatile to be interchanged. The company in addition to a cork-and-curved-quill stopper then had bulb stoppers composed both of rubber and polyethylene and a single pipette which fitted each. These stoppers are still in use and the arrangement has proved highly satisfactory.

Mr. Cholet's original design which the company believes will be the stopper of the future is the new one-piece, seamless-polyethylene stopper with a specially designed polystyrene pipette.

The decision to use polyethylene, of course, was prompted by the fact that this material was translucent and thereby permitted the colors of Higgins American Drawing Inks to be seen through the stopper.

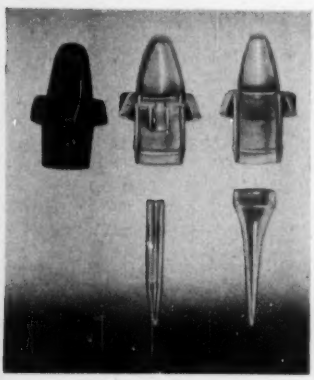
Adoption of polyethylene required a slight change in the lip of the ¾-oz. bottles so that the stoppers could be seated easily. The inside curve of the shoulder of the ¾-oz. bottle agrees with the outside curve and is conducive to excellent corkage, since it promoted mushrooming of the stopper after it had been inserted.

Dependable corkage was further encouraged by the use of an almost unnoticeable friction ring at the point where the stopper should mushroom inside the bottle. A short skirt has been placed on the bottom of the stopper below the friction ring through use of which the stoppers stand upright before being driven home by the corking bridge. Experience indicated the use of this skirt, since the stoppers are placed manually in the necks of the bottles after the latter are filled and it was necessary to prevent wobbling and canting sidewise before the corking bridge descended due to vibration of the machinery.

The inside of the polyethylene stopper is hollow, permitting very little build up of air pressure when sealing a bottle such as occurs with solid stoppers or those composed of heavier material such as rubber. The polyethylene stopper is lighter in weight than either of the others, thus saving a few pounds on large ship-

(*This article continued on page 198*)

PERFECTED ONE-PIECE polyethylene top and polystyrene pipette (right) is pictured with cross sections of formed rubber dropper and polyethylene dropper stopper showing same pipette which is usable with both.



Cherries in molded pulp

TRAY FORMED FROM PLASTER CAST OF AN ACTUAL PACK SIMPLIFIES ROW-FACING OF FRUIT AND GIVES THEM ADDED PROTECTION

Packing Pacific Northwest cherries for major markets of the East is an exacting job. To give these cherries the appearance that their premium quality warrants, they are row-faced. That is, the top of each 15-lb. box that the retailer opens presents cherries in neat, symmetrical rows, as regular and perfect in appearance as soldiers on parade. There may be 10, 11 or 12 rows to the box, depending on the size of the fruit.

The cherries are packed by hand labor into the boxes, upside down. What will become the top layer when the box is opened goes in first. The cherry packer has to learn how to face the fruit in rows and then to pack the fruit solid behind the row-facing. The cherry season is short; there's big turnover of labor every season and that means slow output while green help is catching on.

In the past two years a new means has been developed to speed row-facing. It consists of a molded-pulp tray 10¾ in. wide by 15 in. long—the exact size to fit into the cherry box. The tray provides a cushioned, conforming cup for each cherry, in what will be the top of the box.

Molded pulp has previously been used in the Northwest in the packaging of apples, but has never before been applied to fruit as small as cherries. The packer begins with an empty box and puts in first of all the molded-pulp tray. She then places cherries in the individual cups of the tray. When the row-facing is completed, the packer fills in the box and the bottom is then nailed on. The boxes are loaded in refrigerated express cars, still upside down just as the girls packed them. At the market the box is turned over, the top is removed and the tray is lifted off, its job done. The buyer is greeted with a beautiful, symmetrical pack of top-quality cherries, where appearance goes a long way to sell the fruit.

Called the Kare-Ful-Pak Facing Trays, the pads were originated by Howard K. Prentice, Prentice Packing & Cold Storage Co., Yakima, Wash., one of the Northwest's major fruit shippers.

"Why did we have to wait so long for something so simple?" Mr. Prentice commented as the idea of the trays took form. To shape the trays in the exact size and pattern desired, a plaster-of-Paris mold was made from the choicest box of cherries in the 1950 pack. From this a pulp-products company built the molded-pulp trays.

The biggest saving is in labor. Experienced help can boost their output by 15 to 20%, Mr. Prentice reports. Even more important, inexperienced packers can develop much more quickly into good packers. Turnover in help is reduced, but at the same time, pack quality is raised. "Using the pad, it is almost impossible to get a poor pack," Mr. Prentice reports.

In addition to better appearance through the use of the trays, the cherries get added protection in shipping, a highly important factor for top-quality fruit. The cupped trays help cushion the cherries in transit.

Originally, 2,000 trays were made for the 1951 season. They were used by Perham Fruit Corp., Stadelman Fruit Co., Yakima County Horticultural Union and Yakima Fruit Growers Assn., as well as Prentice. This year a carload of trays was used.

Up to now, trays have been made only for the 11-row pack. Next year they will also be produced for 10-row and 12-row packs.

Similar trays are now being developed for ring-faced half-bushel prunes, ring-faced bushel peaches and face-and-fill apricots.

CREDIT: *Molded-pulp trays, Keyes Fibre Co., Waterville, Me.*

CUPPED TRAYS are placed in empty box. Packer places cherry in each cup. When row-facing is completed, box is filled and bottom nailed on. At market, the box is turned over, top is removed, tray is lifted off and buyer sees a beautiful symmetrical display.

SELF-TIERED CARTONS

UNIQUE CONSTRUCTION PROVIDES ECONOMICAL, EASILY SET UP DOUBLE-DECKER MERCHANDISER

The advantage of a tiered display over one that is made on one level plane is well recognized in the preparation of point-of-sale merchandising units.

To achieve multiple-tiered effects with economical and simply constructed disposable folding cartons, however, has sometimes presented a difficult problem.

An ingenious solution has been reached by Industrial Tape Corp., New Brunswick, N.J., in the adoption of two new double-tiered carton units for its Permacel Painters Tape and Permacel Frozen Food Packaging Tape. Cartons of this type should have many applications for the presentation of countless packaged items dependent on counter selling.

Both units are of similar construction and are designed to hold 12 individually cartoned rolls of industrial tape.

When closed for shipment the cartons look just like the conventional rectangular ones with slip-on protec-

READY FOR THE COUNTER, back section pulls up to lock six individual packages in stepped-up position, giving an attractive angled display unit which helps to increase sales.

6 steps in

TWO COMPONENTS of the carton, delivered flat, are first set up.

tive sleeves previously used for these products.

When the sleeve is removed, all the dealer has to do to make an attractive two-tiered display is to lift up the back display panel and keep pulling until the six individual cartons in the back of the unit rise up and lock into position above the front six. By bending back the side tabs on the top display panel, the riser piece is held securely upright.

The unique features of the carton are provided by clever, two-piece, die-cut construction. One piece forms the base of the box and holds the front or lower tier of individual boxes. The other forms a compartment for the higher tier of boxes and the stand-up display panel.

The units are assembled in this manner: Both parts, delivered flat to the user, are first set up. The part containing the upper tier of packages is filled and placed in the base part against the back wall. The slotted and scored front flap of the base part is then folded into the carton in front of the already-placed, second-tier part and filled with the remaining six individual cartons. The display panel is folded down and the unit is ready for slipping into the sleeve.

A message to the dealer which is printed on the outer sleeve tells how to set up the display: "Remove the outer sleeve and pull display panel up to form two-tier display." Two line drawings, also printed on the sleeve, illustrate the simple procedure.

The step-up locking of the upper tier is effected by two die-cut and scored square flaps on the back of the upper-tier section which engage in two die-cut square holes on the back wall of the base piece. Two additional square, die-cut and scored tabs on the front fold-over section of the base are released when the back section is pulled up and hold the upper tier in position.

Once the unit is pulled into its two-tiered display position it is permanently locked, unless disassembled and re-arranged. This is considered an advantage in that it is believed it will help to keep the unit on the counter until contents are completely sold.

While taking up no more shipping space than previously used counter cartons, the new tiered unit when raised to its full height provides a much larger display area on the counter.

The carton's printed surfaces offer ample space for colorful sales messages on all sides as well as on the traditional top display panel. And the two distinct rows provide much more attractive package display. The novel construction so far has more than lived up to the company's message to dealers: "Designed to help you increase your sales. Display it in full view—it will sell more tape for you."

CREDITS: *"Steploc" display cartons, Pioneer Folding Box Co., Inc., 26 Journal Sq., Jersey City 6, N. J. Surface designs, Jim Nash, 405 E. 54th St., New York.*

factory assembly

UPPER TIER is put in the base.

FRONT FOLD of the base is positioned.

CARTONS are put in the lower tier.

SLEEVE is slipped over entire unit.

One pull to open

BY PULLING UP the display panel, the back tier is raised.

Packaging's Hall of Fame

FORTY-EIGHTH OF A SERIES

Cracker Jack

"Take me out to the ball game,
Take me out with the crowd—
Buy me some peanuts and Cracker Jack,
*I don't care care if I never get back . . ."**

When this perennial musical favorite was published in 1908, a new confection combining molasses-coated popcorn and roasted peanuts was rapidly gaining in popularity all over the country. The market acceptance of Cracker Jack, at a time when most confections and other food products were still inadequately packaged by modern standards, was made possible by a new-type triple-sealed package which was one of the first heat-sealed packages. Its heat-sealed waxed-paper construction effectively shut out moisture and paved the way to nation-wide distribution. The essential features of this highly successful package were widely adopted by manufacturers of cereal products and other foods requiring protection against moisture penetration and the heat-sealing principle was, of course, the foundation of all of today's moistureproof packaging with flexible materials.

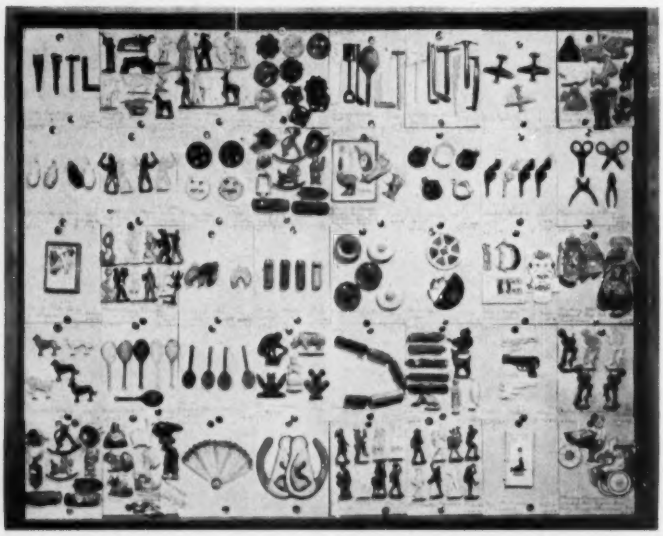
The package which made possible Cracker Jack's vast distribution and sales was so fundamentally sound in construction that even today, more than 40 years after issuance of the original patent, the product is still protected in virtually the same manner. And the early red, white and blue package design, highlighting a diagonally arranged logotype on one display panel and the blue-clad sailor boy and his dog mascot, Bingo, on the other, would be quickly identifiable on the sales counter of a modern drug store or supermarket. Except for progressive modification of detail through the years, to keep it abreast of changing merchandising trends, the package remains substantially unchanged.

More than half a century after its debut, Cracker Jack continues to hold its position as one of the nations' best-known and best-liked confections. It is the largest-selling popcorn product in the world. The scores of imitators which, particularly in the early days, sought to capitalize on the popularity of Cracker Jack through similarity of product or package have long since faded out of the picture; but Cracker Jack rolls steadily onward, winning new friends among the younger generation and continuing to hold the loyalty of millions who remember first buying it as a child.

Another major factor in the selection of the Cracker Jack package for this month's *Packaging's Hall of Fame* nomination is the unique part it has played in making premiums-in-the-package an effective sales stimulant. Cracker Jack initiated, in 1908, the practice of including in each package of the confection a small toy or novelty to delight and amuse juvenile purchasers. Cracker Jack is today undoubtedly the world's largest user of premiums packed directly in the package, purchasing more than 250 million toys and novelties per year for this purpose. It has devoted much effort toward the developing of special premium-wrapping techniques and

* Copyright 1908, York Music Co.; copyright renewed and assigned 1936 to Jerry Vogel Music Co., Inc.

TYPICAL PRIZES in Cracker Jack packages today. Company maintains file samples of thousands of items used since 1908. About 75% of today's prizes, comprising 200 million pieces annually, are molded of plastics.



NOMINATED FOR PACKAGING'S HALL OF FAME BECAUSE:

- Its triple-sealed package of heat-sealed waxed-paper construction 47 years ago helped lay the foundation for all of today's moisture-proof food packaging.
- It is the world's leading practitioner of premium-in-the-package selling, using 250 million "prizes" a year.
- Its protection of brand name and package identity has been as vigorous as its development of new and better packaging methods.
- Package and product quality have proved so unbeatable that today, still a 5-cent product, it has no rivals.

PRESENT PACKAGE is modernization of basic 1896 design. Triple-sealed protection has been a feature since 1905. Sailor boy and dog appeared in 1910. Production reportedly exceeds 250 million packages yearly now.

PROGRESSION of design shows careful maintenance of basic design features on package face. Cracker Jack still sells for 5 cents—with prize in each pack.

has sought the most efficient methods of getting the premiums into the package along with the confection, helping to develop special machinery for the purpose. In this connection it is interesting to note that Cracker Jack, having pioneered heat sealing, has now become the first big packaging user of self-sealing waxed paper, which eliminates heat sealing. It is using this new material on most of its premiums.

In a world of shifting values, it is refreshing to find also that the original 5-cent price of the Cracker Jack package is still being maintained.

Cracker Jack is one of many *Packaging's Hall of Fame* nominees to whom the Brand Names Foundation has awarded its Golden Anniversary Certificate of Public Service—an honor bestowed only upon "brand names which have been tested by the judgment of the American people for 50 years or more and have won and held public confidence through unfailing integrity, reliable quality and fair pricing."

Popcorn since 1872

It was in 1872 that the firm of F. W. Rueckheim & Bro., forerunner of the present Cracker Jack Co., was established in Chicago to manufacture popcorn specialties. By the early 1900s, production had been expanded to include a complete line of items ranging from Cracker Jack and marshmallows to bar goods, penny goods, bulk candies, packaged chocolates and other products. Around 1920, with the trend to increased specialization in the confectionery field, the candy items were discontinued and efforts concentrated on Cracker Jack and marshmallows. This arrangement continues to the present; in addition to Cracker Jack, the company also is a leading manufacturer of marshmallows under the Campfire, Angelus and Recipe brands. Since 1922 the corporate name has been The Cracker Jack Co.

It was in February, 1896, that F. W.

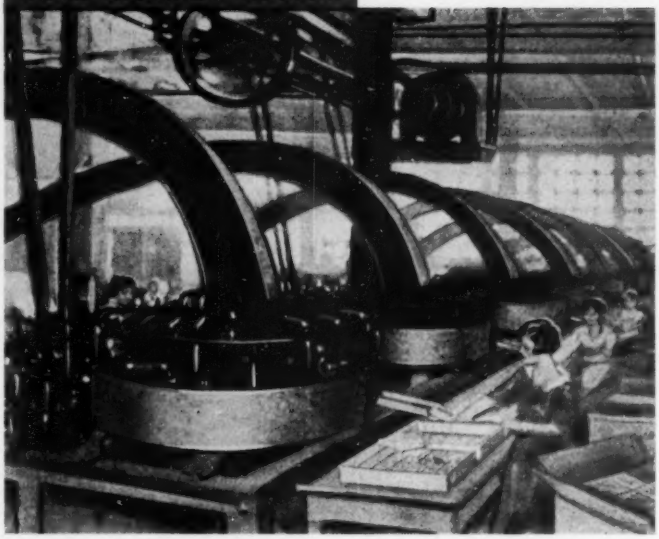
Rueckheim was shown the first batch of molasses-coated popcorn, which his brother Louis had prepared. While sampling and tasting the confection, one of the company's salesmen enthusiastically exclaimed, "That's a cracker jack!" Mr. Rueckheim looked at him and said, "Why not call it by that name?" "I see no objection," replied the salesman. "That settles it, then," concluded Mr. Rueckheim.

Accordingly, the name Cracker Jack and the slogan, "The More You Eat, The More You Want," were copyrighted in 1896 and have been used continuously ever since.

Following its market introduction in February, 1896, Cracker Jack was first sold in bulk in 10- and 25-lb. wood cases and 5-lb. paper boxes. In the spring of 1896, a 5-cent package was introduced which consisted of a linerless printed paperboard box with locking ends. To improve the protective function of this package, a liner of 55-lb. No. 1 manila waxed paper was introduced. The liner was folded around a wooden block and slipped into the carton, which was then filled with Cracker Jack, after which the open end of the liner was folded down and the end of the carton closed. The package was not sealed.

Unfortunately, this package failed to provide sufficient moisture protection for the product. The very first year, considerable quantities of Cracker Jack which had been shipped to Eastern distributors were returned because the product had become sticky and tough. Soon afterward, the company began over-packing the 5-cent packages in returnable tins containing 50 and 100 packages, as was the custom in the cracker and cookie industry at the time. This measure kept the product in good condition until delivered to retail outlets, but the cans were quite expensive and the added protection was soon lost at the point of sale after repeated openings.

THE EARLY DAYS

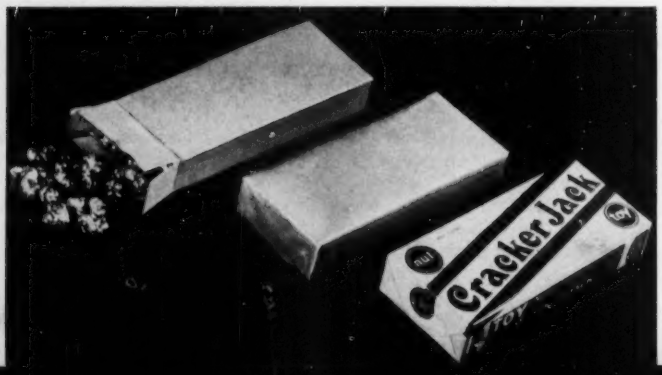


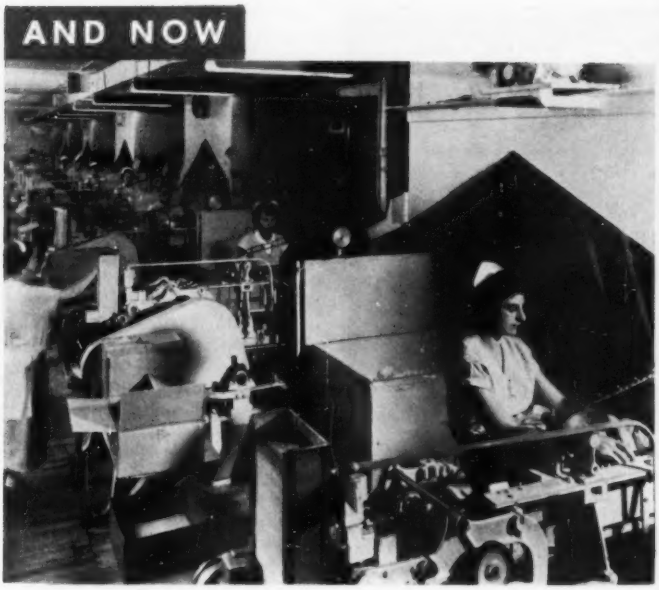
50 YEARS AGO, as indicated by this illustration from an anniversary booklet, the packaging department was a maze of cumbersome machinery and overhead belts. But the product was then "untouched by human hands."

When H. G. Eckstein joined the firm in January, 1899, the lock-end package with waxed liner was still in use. With this package, the firm was unable to extend its effective distribution much beyond the Chicago area; even on shipments within 300 or 400 miles, the confection would frequently become unsalable before reaching the dealers. In an attempt to overcome this limitation, Mr. Eckstein began a series of packaging experiments. Some packages were put out with a double waxed-paper liner. In 1899 the company began sealing carton ends by means of silicate of soda. In 1901 an improved waxed inner package was adopted which permitted somewhat broader distribution. For increased moisture protection these packages were wrapped in bundles of 20, in heavy waxed paper, before being placed in wood cases.

These progressive improvements logically culminated in the sealed waxed wrapper developed by Mr. Eckstein in 1904 and adopted for general use the following year. With the new "triple-sealed" package, the company was soon able to extend its distribution to all parts of the United States and to develop an excellent export business, especially in Hawaii and the Philippines. Whereas sales of Cracker Jack in 1904 were approximately 11 million 5-cent packages, they rose in 1905 to around 16½ million packages, with no material change in advertising or sales methods. By 1912 sales had reached approximately 33 million packages and the sales advantage of the superior protective package had been established without question.

TRIPLE-SEALED construction is the secret of Cracker Jack's freshness and hence of its success. The carton is overwrapped in heavily waxed paper, then heat sealed and finally dipped (the ends only or completely) in molten wax. The final printed wrap is of heat-sealed waxed paper.





PACKAGING TODAY is a study in streamlined efficiency. This photo shows start of the packaging lines, with the cartons feeding from magazines at the left. Operator drops in the wrapped prize prior to filling.

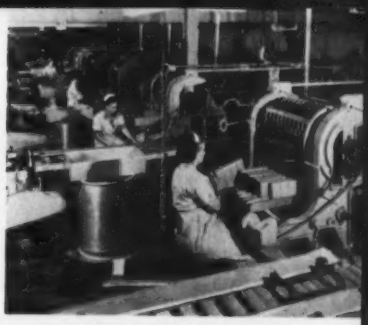
The new Cracker Jack package was covered by Patent No. 881,561, issued March 10, 1908. Specifically, the patent covered "paper packages or cartons for marketing candies, popcorn, coffee, tea, shelled peanuts or other similar goods or merchandise which deteriorate and become stale on exposure to the air."

Sections of the original patent are interesting in that they plainly point out the difficulty of obtaining a tightly sealed, moistureproof package and show how the Cracker Jack package was designed to overcome this problem.

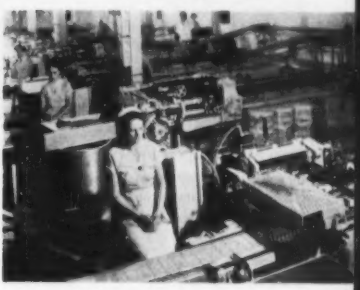
The following extracts from the patent provide an example:

"In the endeavor to properly protect candies and other loose merchandise, paper partially saturated or having a wax coating on one or both sides has been employed usually as an inner wrapper loosely folded about the goods and arranged within an outer protecting wrapper or carton of heavy stiff paper which holds the folds of the waxed paper in place. But such waxed wrappers are loose, that is, the overlapped portions or folds cannot be glued tight because the wax coating acts to prevent adhesion of glue or other sealing medium and the package is not airtight or impervious to atmospheric moisture and will not prevent the deterioration of goods for more than a few days, particularly if the merchandise for which the package is employed is like candied popcorn, for example, very susceptible to the deleterious effects of moisture. . .

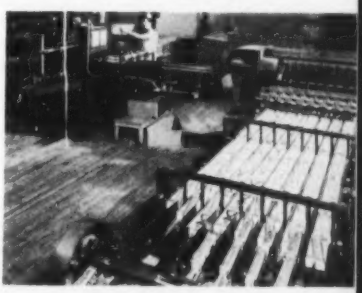
"Paper waterproofed with wax cannot be satisfactorily sealed with glue or other cement and I have been unable to find any satisfactory method of sealing the ordinary waxed paper now on the market, which usually has 10 to 25% wax. I have found, however, that a wrapper of flexible paper supersaturated with wax, say from 45 to 55% of the total weight and having a heavy surface coat, when folded about and held in shape by an inner wrapper, box or carton of stiff paper or other suitable material, may be satisfactorily sealed at all points to render the paper package air and moisture tight through aid of the contained wax, by first heating the folded flexible wrapper to melt or partially melt the wax along the folded por-



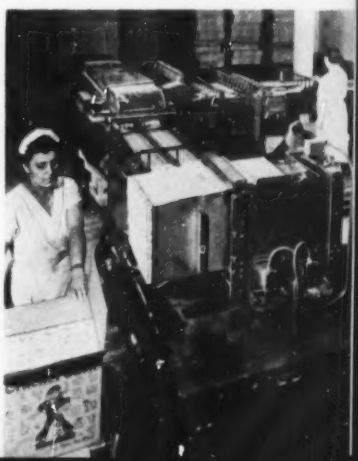
DIPPING IN WAX, following application of first waxed-paper wrap, is accomplished by special machines, 10 packages at a time.



OUTSIDE WRAP is applied at high speed from continuous rolls by these fully automatic machines with electric-eye controls.



COMPLETED PACKAGES are collated via channeled conveyors to automatic casing equipment.



AUTOMATIC CASERS accumulate packages in proper arrangement and then push them, as a unit, into corrugated shippers.

WRAPPING OF PREMIUMS, after inspection and sorting to assure variety in final packaging, is done in this department. At left is one of two specially built machines using new self-sealing waxed paper for this purpose. With a third machine, department turns out 600 items a minute.

tions and pressing the folds into close contact at all points and permitting the wax to cool and set. . . "

Thus Cracker Jack could claim to have produced the first heat-sealed package. But the claim was disputed. Patent suits arising from the use of similar package construction by other manufacturers centered around whether the Cracker Jack package, utilizing the contained wax of the "supersaturated" inner wrapper to achieve heat sealing of the seams and end folds, involved patentable features or whether the same sealing method had been used earlier by others in wrapping bread, popcorn bricks, yeast and other food products in wax-impregnated paper or other materials. The many legal actions involved filled thousands of pages with expert testimony on waxed paper manufacture, heat-sealing machinery and methods, as well as other related topics.

After vigorously defending its patent for many years, the company eventually lost out in the courts. By that time, however, the patent had only a few years to run and Cracker Jack had long since established its dominance as the king of popcorn confections.

The premium idea

With the question of a successful package settled, the company was able to devote increased attention to sales and merchandising. It was in 1908 that the company began packing a toy or novelty for the children in each box of Cracker Jack. The well-advertised presence of the "prize in every package" gave a tantalizing air of mystery which added up to a strong sales stimulant. In addition, it guaranteed that the package would be opened without delay once it reached the hands of the buyer. Few children could resist the impulse to break the seal and discover what type of novelty awaited them. So successful was the new merchandising step that the procurement and packing of low-cost premiums soon became an important phase of the company's activities.

Samples of practically all the novelties which have been used since 1908 are kept in multiple file drawers in the Cracker Jack executive offices. Many of the early novelties were imported from Japan—tiny porcelain dolls, intricately hand-made paper fans, strings of beads and hand-decorated whistles, puzzles, etc.

The metal shortages of World War II brought sweeping changes, switching the bulk of the novelties into paper.

Looking for a way of giving its toys greater variety and interest, the company then began investigating molded plastics. It was soon discovered that the plastic premiums, with their inherent color, light weight, virtually unlimited design range and low-cost mass-production possibilities through the injection molding process presented many advantages. Currently, about 75% of the novelties are plastic, with most of the remainder in paper and less than 1% fabricated of metal. The company's requirements call for approximately 200 million plastic items per year—which gives a good clue to the number of packages produced.

Inspiration for many of the novelties comes from the extensive travels of Frank A. Werner, a vice president of the company. An accomplished silversmith, Mr. Werner carves the wooden originals from which many of the molding dies are made. Close attention to detail and perfection of design make many of the toys and novelties collectors' items—miniature reproductions of costly ceramic pieces, for example, or intricately hand-carved Oriental figurines. Cracker Jack does not mold its own novelties, but obtains them from a number of companies which produce them on a contract basis.

All plastic and metal items are inspected and individually wrapped on high-speed specialized equipment before being placed in the package with the confection—an outstanding mechanical development of the Cracker Jack Co.†

Packaging operations

Cracker Jack packaging operations are centralized in a large area housing a series of high-speed packaging lines where the packages are filled, sealed and wrapped automatically. In this room, temperature and relative humidity are rigidly controlled to insure that the product is packaged under the most favorable conditions. Due to the tendency of the confection to pick up moisture, causing it to stick together, it was once necessary to discontinue packaging operations during periods of high humidity. With air conditioning, packaging continues uninterrupted regardless of weather conditions. The present plant schedule calls for three-shift operation six days per week.

Supplies of Cracker Jack, manufactured on the third floor of the plant, are carried to the second-floor packaging department by six enclosed screw-type conveyors, each feeding product to two packaging lines. At the

† See "Cracker Jack Premiums," MODERN PACKAGING, Nov., 1951, p. 86.

beginning of each line, the paperboard "insiders," or interior boxes, which come to the plant with side seam glued and folded flat to require minimum space, are loaded into supply magazines. As soon as each inner carton is stood upright and the bottom flaps folded into closed position on the automatic equipment, it moves down the line past an operator who manually drops a premium or novelty in the package. Due to the necessary variation of premium types and sizes, this stage of the packaging operation defies mechanization.

The cartons pass down the line with top flaps open, passing beneath filling spouts where the proper amount of Cracker Jack (minimum of 1¼ oz.) is volumetrically transferred into the package. Moving past a weigh station which automatically rejects any underweight packages, the cartons are then overwrapped in paper which has been heavily waxed in the company's own waxing department. Next the wrapped box (on some lines) passes through end dippers which flow melted wax on the folded ends, effecting a secure seal. On other lines, the entire wrapped box is immersed in liquid wax, one half at a time, receiving an all-over coating for maximum protection. On the Cracker Jack equipment, the boxes thus processed are gang-dipped 10 at a time.

Final phase of the packaging operation is the application of the red, white and blue waxed outer wrapper, which is performed on high-speed automatic equipment. Fed from continuous rolls, the wrapping material is continuously imprinted with a code designation indicating the packaging line, shift and day of the year on which the wrap was applied. Ends of the outer wrapper are sealed by heat and pressure. Finished packages move via belt conveyor to a series of channeled conveyors which carry them through openings in the wall and into the packing department.

Three styles of corrugated shipping containers are used for Cracker Jack. The two larger sizes, which hold 50 and 100 individual boxes of the confection, carry an all-over background pattern showing a number of the toys and novelties, along with a large reproduction of the consumer package and the sailor-boy trademark. The other shipping case, holding 24 packages, virtually duplicates the surface appearance of the individual package. This type bears the notation, "Carry Out Satchel," and features a die-cut carrying handle which folds flat when not in use.

Case packers on all packing lines are of a type which elevates the packages layer by layer as they arrive from the packaging department and then pushes the full load horizontally into the shipping case, held in position by a mandrel. Filled cases are then glue sealed on all flaps and, after passing through compression belts, automatically descend by spiral conveyor to the first floor, ready to be loaded for shipment.

The new shipping cases, attractively printed in red and blue to harmonize with the individual packages, were introduced in 1951, replacing plain cases which carried only routine identification and had little sales appeal. They have been enthusiastically received by the trade. The new carry-out satchels, in particular, have been effective in building "plus" business for picnics, parties, Halloween "trick or treat" visitors, etc. They lend themselves ideally to self-service merchandising.

Package quality control

In addition to its constant supervision and testing of raw materials, including package components, a primary function of the Cracker Jack plant laboratory is to make certain that finished packages meet specific standards. To accomplish this objective, sample packages from each packaging line for all three shifts are stored daily as controls. All such samples are held for six months and checked periodically for product protection. With this system, and the coded designation on each package, mechanical difficulties or other irregularities on the packaging lines can be promptly traced down and corrected. The control samples also provide an accurate check in the event of any product or package complaints which may be received from the field.

Laboratory requirements for the Cracker Jack packages are tough. As indicated above, the company strives for a minimum shelf life of six months. Packages must also be able to undergo 14 days in an air-regulator cabinet at 100 deg. F. and a relative humidity of 90% without permitting the confection to pick up moisture and stick together. In the Cracker Jack laboratory, a package that fails to rattle when given the "shake test" is immediately suspect. Another test given to a representative number of samples consists of submerging them in a water tank in a specified position, to detect the presence of possible leakers. Results of these tests are tabulated on a printed form which charts the location of the leak and shows the line from which the package came, the time the sample was taken from the line, total leaks and number of leakers. This test pinpoints incorrect wrapping or sealing, insufficient application of wax during the dipping process and other points which, if left uncorrected, would lead to complaints in the field.

The complete operation of wrap-

MODERN IDEA for multiple-unit sales is this 24-pack corrugated container with lift-up handle, popular in supermarkets.

MASS DISPLAY suggested for supermarkets uses 18 of the regular 100-pack shipping cases, with a paper leader. Case, colorfully printed in red and blue to show the variety of prizes, was designed for this purpose.

ping premiums is now handled by three semi-automatic wrapping machines using a total of five operators, in addition to those who inspect the items before they are wrapped. The three wrapping machines, which seal the toys between two webs of lightweight waxed paper, can handle a maximum total production of approximately 600 items per minute. Two of them, specially developed for Cracker Jack, are tandem units, requiring one operator on each side; these machines are now using a newly developed pressure-sealing waxed paper that requires no heat seal.** The other, standard machine uses a conventional heat seal.

Premiums from all three of the machines are discharged on a conveyor belt which carries them past bins filled with other novelties (such as die-cut paper toys) which require no wrapping. Additional operators scatter these at random on the moving belt to insure that they will be thoroughly intermixed in the final package, to prevent duplication of toys in the same shipping case.

Changes in the Cracker Jack package design have been evolutionary rather than revolutionary. Some of the principal modifications which have been made since the package first appeared on the market in 1896 are shown in accompanying illustrations. In general, the trend has been toward progressive simplification of the design and elimination of unnecessary details to keep pace with merchandising developments. The basic elements of the design, essentially unchanged through the years, have always given the package ready identity.

The same color combination of red, white and blue, adopted at the outset, has been retained throughout the history of the product. Red borders included in the earlier package design were eliminated about 1930, giving the package a more clean-cut appearance.

The sailor-boy trademark did not appear on the earliest packages, but was added about 1910. A modified sailor design, drawn up in 1920, was retained through 1940, when the present printed outer wrapper was adopted.

Many of the early Cracker Jack packages carried a statement reading, "Package may be opened and examined before purchasing," or the equivalent. This statement, which was used on the package until around 1930, apparently reflected the fact that in the early days of packaged confections, when packaging materials and techniques were a far cry from those available today, many products could not be counted upon to stay fresh for long. Confident of the protective features of its triple-sealed package, Cracker Jack felt perfectly safe in encouraging prospective buyers to open and examine the product prior to actual purchase.

In 1932 the package was modified slightly by the adoption of an extended end. The specific purpose of this extension was to provide space for the novelty or toy and to call attention to it more emphatically in the package design. In 1940 the extended-end feature was discontinued and has not been used since. New copy on the end panel read, "Help keep your parks clean and beautiful. Do not throw empty packages on the ground. Please throw them into the nearest waste basket. Thank you."

Up until 1940 the surface design of the Cracker Jack package had been carried directly on an outer paperboard carton into which the wax-wrapped "insider" was placed. In that year the outer carton was eliminated in favor of the present type of printed waxed paper outside wrapper, necessitating modification of the packaging lines. Use of the outer wrapper does not mean that identity is lost when the package is opened, for the wrapper clings tightly to the inner package even after the end flaps have been opened. With the transition to the outer wrapper, the notation, "Place empty box in waste basket," appeared in a circle on each end of the package. Instructions reading, "To open package press hard here" were also included on the package end. Application of pressure at this point breaks the end of the side seam on the inner carton and facilitates removal of the end flap.

If imitation is indeed the sincerest form of flattery, Cracker Jack has had much cause to be flattered—particularly in the early days, when hosts of products sprang up which attempted to capitalize upon the popularity of this confection. Imitation involved not only the product itself, but also, in many instances, the trade name and package design and construction. Officials of Rueckheim Bros. & Eckstein devoted a great deal of time to protecting the trademark and the patented package construction.

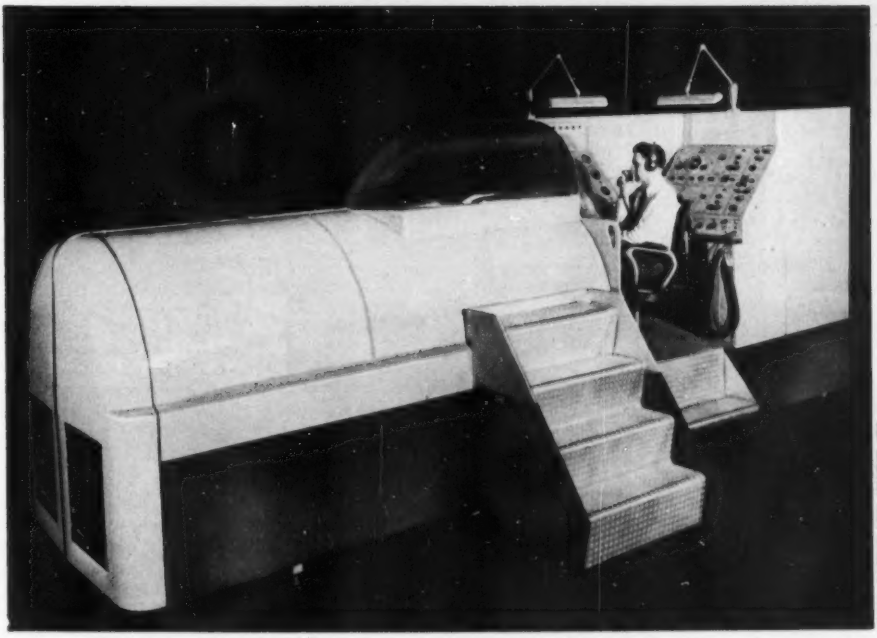
Public relations

The regard in which Cracker Jack is held by the public is perhaps most clearly shown by the hundreds of letters received each month. All such letters, whether written by adults or as sometimes happens, scrawled by some youngster whose only words are, "I love Cracker Jack. I hope you make it forever," they are promptly acknowledged by an official of the company. Children as well as grown-ups write in to tell about their collections of Cracker Jack novelties and toys. A lady living in a Southern state went to some length to inform the company how she had built a miniature zoo with the Cracker Jack animals, which children took delight in visiting. The company management highly values

(This article continued on page 188)

** See "Cohesive Papers," MODERN PACKAGING, Nov., 1951, p. 82.

KID APPEAL has always been the basic selling strategy of Cracker Jack. This billboard poster by G. W. French, which was current in the 1920s, typically combines that with the take-me-out-to-the-ball-game theme and the famed slogan, "The More You Eat, The More You Want."



PHOTOS COURTESY LINK AVIATION, INC.

SIMULATED AIRPLANE is broken down for shipment into eight packages, each of which is guaranteed by Link to protect the contents against either arctic or tropical weather conditions for 18-month period.

Simplifying the complex

LINK'S METHOD II PACKAGING OF AIR FORCE JET TRAINER SHOWS HOW LARGE AND DELICATE ITEMS CAN BE EXPEDITIOUSLY HANDLED

Military packaging of the Method II (dehydrated) type, which once seemed so formidable, has been simplified by improved materials and techniques and is today being applied routinely to even the largest of military items requiring positive protection against corrosion.

An example is the procedure that Link Aviation, Inc., Binghamton, N. Y., has developed for its C-11A jet aircraft pilot trainer—a huge and complex instrument crammed with electronic controls that simulates the cockpit of a fighter plane both in size and performance.

The trainer is a stationary device; therefore the delicate equipment it contains is not shock mounted and, with the exception of a few rugged items such as cooling fans, must be removed and shipped separately.

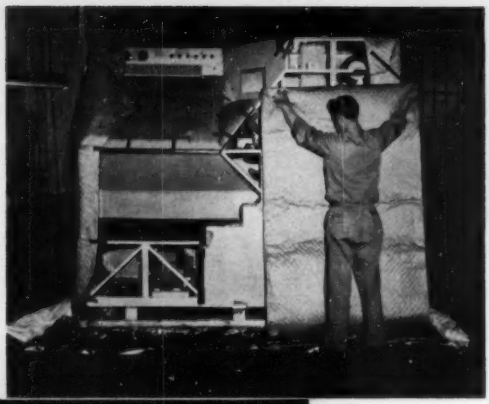
The packaging problem is this: to get the trainer disassembled and packaged so that after it has been shipped, stored for as long as 18 months under any possible indoor or outdoor conditions and re-assembled for use, it is not only intact but still close enough to its original factory state of adjustment to be approximately ready for use.

To achieve this, the trainer and all of its parts must be provided with a water-vaporproof Method II package which also protects the units against shock or jarring.

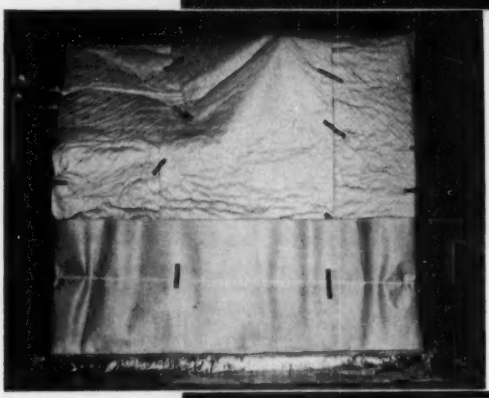
The basic package is a cushioning wrap of kraft-backed cellulose wadding, followed by a sealed barrier of reinforced aluminum foil. Silica gel is placed inside this wrapping to control humidity and most of the air is exhausted from the package just before final sealing. For the four large frame sections of the trainer, this package is all that is required before crating, except for a simple skirt of flexible corrugated board. The cushioning has primarily the purpose of preventing the unit's sharp edges from puncturing the barrier after exhaustion of the air molds the shroud tightly to shape.

The sensitive electronic units removed from the sections, after being Method-II packed individually, are placed in corrugated boxes with plenty of shredded waxed paper. These boxes, in turn, are nested in more shredded paper in the packing cases. The individual units also receive a preliminary wrapping of Grade A greaseproof paper which serves to prevent any shreds of the wadding from being caught in the mechanism and to contain any possible leakage of oil, wax, etc.

The versatility of the cushioning sheet material and of the foil barrier

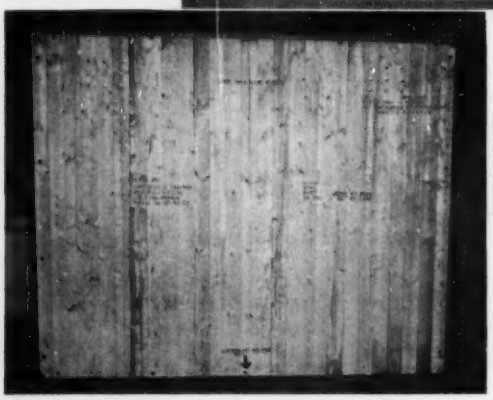


CREPED cellulose in huge sheets covers all sharp edges of section that might puncture the barrier.



PADDING is taped together and, for extra protection, a skirt of flexible corrugated is taped and tied around the base.

SEALED foil barrier, with air drawn out, conforms closely to contents. Silica gel inside maintains low humidity.



READY TO SHIP, section is contained in wood crate roofed with cement with a special paper over it.

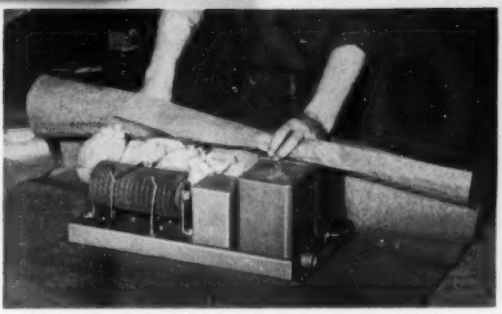
is such that they can be used throughout the packaging operation. The same cushioning material is cut into convenient sizes for wrapping the small units and is used in large sheets to drape the trainer sections. Extra pieces of the same material are taped over corners or danger points that require more cushioning to protect the barrier from being punctured. The foil barrier is used, prefabricated into bags, for wrapping the small units; for large sections it is taped in place in 70-in.-wide strips. For either, a simple hand heat sealer welds the barrier into a sealed vapor-tight shroud.

The wooden outer packing cases for the sections of the trainer and the electronic units shipped separately are all completely lined with a sisal-reinforced, asphalt-impregnated paper and the case tops are roofed for possible outdoor storage with an extra layer of the paper set in roofing cement and extending down the side of the case in a wide, stapled overlap. Cases are heavily nailed and bolted.

During the packaging operation great care is taken to avoid disturbing the delicate calibration and adjustment of the trainer mechanisms. They must not be jarred during disassembly or wrapping. The assemblers' serial-number check is double checked in shipping to avoid mixing sections or units from different trainers and each unit is labeled to indicate clearly to which section of the trainer it belongs. The three cases for units are labeled to show in which section the units in the case belong. Care taken here can save many hours in point-of-use assembly.

Although mass produced to fill pressing need, the trainers are packed to endure 18 months of any possible tropical and/or arctic weather; condition is guaranteed by Link for that period. At the end of this period, if the trainer is still in storage, a color-keyed humidity indicator must be inspected and the silica gel replenished if necessary.

CREDITS: *"Kimpak" cellulose wadding, Kimberly-Clark Corp., Neenah, Wis. "Metalam" foil barrier, The Dobeckmun Co., 3301 Monroe Ave., Cleveland 13, Ohio. Hand heat sealer, M & R Co., Mansfield, Ohio. "Corroflex" flexible corrugated board, Sherman Paper Products Corp., Upper Newton Falls, Mass. "Fibreen" case lining, The Sisalkraft Co., 205 W. Wacker Dr., Chicago 6. Greaseproof inner wraps.*



POWER-SUPPLY UNIT is illustrated above receiving its preliminary wrapping of Grade A greaseproof paper.

SECOND COURSE is this kraft-backed creped wadding, under which silica gel is placed to control the humidity.

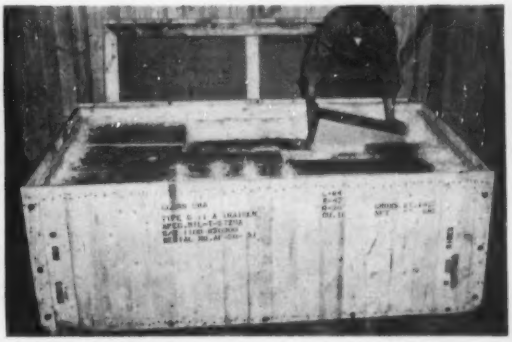
TAPE SECURES the ends and folds of the cushioned wrap, which also prevents tears and soaks up any leaks.

BARRIER BAG, which is prefabricated of a lamination of scrim, polyethylene, foil and vinyl, is then applied.

AIR IS EVACUATED, prior to sealing of the barrier bag, by a vacuum hose inserted in a 2-in. opening in bag.

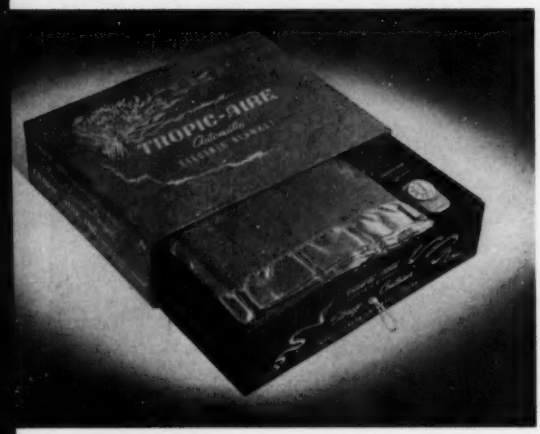
JAW HEAT SEALER, which is operated by hand, then quickly seals the remaining opening of the barrier bag.

EXTERIOR CUSHIONING is provided by placing shredded waxed paper around the unit, within a conventional carton.



CARTONED UNITS are assembled in wood crate, waterproof-paper lined and packed with shredded waxed paper.

Electric blankets in a permanent storage box



Tropic-Aire, Inc., a subsidiary of McGraw Electric Co., developed this drawer-type gift case and storage container for its new automatic electric blankets after a study of existing blanket boxes. Both functional and eye appealing, the new corrugated container has a slide-and-shell construction. It requires no more counter space than a single blanket, yet may be conveniently opened for viewing blanket color. A cellophane envelope enclosing the top blanket fold protects the merchandise against soilage yet enables the customer to feel the texture in the lower folds. The Comfortrol temperature regulator nests in a die-cut platform at side of inner drawer. The color pull, attached to drawer front, indicates color of blanket inside. Box is a permanent storage container.

CREDITS: *Design, W. L. Stensgaard & Associates, Inc., Chicago. Box, The Ohio Boxboard Co., Rittman, Ohio.*

Insert holds boots in place

An ingeniously devised insert for the conventional box packaging cowboy boots, developed by H. J. Justin & Sons, Inc., for its Justin "Bootlegger" boots eliminates the possibility of boot legs losing their shape in shipment and storage—a problem which has always plagued manufacturers and dealers.

The insert is made from a single sheet of heavy paperboard die cut so that two portions are folded out of it, forming leg spacers that fit snugly inside the legs of the boots. Slots for the sides of the boot soles are also cut in the sheet. With the insert placed in the box tray, the boot legs positioned by the leg spacers and the soles engaged in the insert, the boots are firmly held in fixed positions.

When the box lid is in place, the box may be turned any way and handled roughly without the boots moving from their positions relative to each other and to the insert and the box. Even when the top of the box is removed, the boots still hold their positions.

The box also provides the purchaser with a convenient storage container for the boots.

CREDITS: *Insert, Packaging, Inc., Fort Worth, Tex. Box, Campbell Mfg. & Paper Supply Co., Fort Worth, Tex.*

HISTORIES

Interchangeable package that spells economy

Substantial savings—both in the cost of packaging materials and of packaging labor—have been reported by Glaxo Laboratories, Ltd., Greenford, Middlesex, England, since the introduction of this new package for penicillin and streptomycin preparations. The pack comprises a simple basic container, printed only with company name and trademark. This is fully interchangeable for use with some 70 different formulas by inserting an appropriately printed card strip which holds the two cartons together and by another printed card (in a distinguishing color for each product) which fits into the cartons and can be read through elliptical windows in the cellophane-wrapped package. Whether it holds the 5- or 10-cc. size, the pack contains two cartons each holding five vials, regardless of contents. The interchangeable inserts may be picked up from stock to fill rush orders and, if not stocked, can be printed on short notice.

New protection for roses

C. E. Wilson Nurseries credits this specially developed package with an important part in the sales success of its patented rose bushes. Before being placed in the sturdy, lock-end folding carton, 22 in. long, the plant is wax coated to control moisture loss and moss is placed around the roots. Then the bush is encased in a moistureproof inner bag of polyethylene. Die-cut display panel of the carton permits inspection of the plant without removal from the box; use of bleached board on inside of the carton serves as a light reflector and makes the bush more clearly visible. Printed in dark green with red on the Seal Pakt emblem and paragraph headings, the carton carries on side and back panels detailed information on planting and care of roses, as well as facts about the superior features of the package. Space above the die-cut window is left blank so that the nursery may paste on a lithographed label with full-color reproduction of the rose variety in the package. Several boxes are placed in corrugated cases for shipment.

CREDITS: *Carton and shipper, Gaylord Container Corp., St. Louis, Mo. Polyethylene bag, The Visking Corp., Terre Haute, Ind. Labels, J. Horace McFarland Co., Harrisburg, Pa.*

STRONGER BRAND identity and picture key to product contained are features of new spot label which replaces old wrap-around label.

ANN PAGE

4th generation

LATEST LABEL DESIGN FOR ONE OF AMERICA'S LARGEST PRIVATE-BRAND FAMILIES

STRESSES SPOT IDENTIFICATION WITH HIGH-FIDELITY PRODUCT ILLUSTRATION

A new family of Ann Page labels has made its debut in A & P markets. Designed on the basis of the latest and most compelling lessons to be culled from today's experience in super-competitive, supermarket merchandising by the largest organization in that field, the present Ann Page labels feature streamlined brand and product identification plus new emphasis on printing quality and effective use of color and illustration to heighten purchase appeal.

The intended effect—no different than that sought by most alert packagers of grocery products today—is significant because A & P is using a strategy of *maximum reproduction* as a means of assuring required label sales performance.

The new spot labels on jars of pure fruit preserves, for example, are letterpress printed on de luxe-grade coated stock in four colors. Labels on each type of fruit preserves are illustrated with pictures that have been reproduced from paintings of the original fruit.

The former wrap-around labels in two colors on sulphite paper contained no illustration. They adequately identified brand and product, but lacked fast action and were entirely devoid of any special appeal.

A new signet-type logotype is centered at the top of the new label and overlaps the fruit illustration. The new emblem is a square red panel with a narrow border and the name "Ann Page" printed in reverse-plate yellow.

The familiar cameo profile of Ann Page, which formerly symbolized the brand name, has been eliminated because it would have made the compact new identifying emblem "headstrong."

The net effect of the new logotype and its overlap position on the product illustration is instantaneous identification of both the brand and the product.

Such identification is a fundamental requirement on the part of A & P, because Ann Page customers buy two

ways—by brand and also by product.

The name of the product—such as peach preserves, honey, etc.—is printed in large, bold sans-serif type directly under the product illustration. Incidental information is printed around all four edges of the rectangular label in such a way as to form a pleasing border. Jams and preserves are distinguished by variations in label background colors—all white for preserves and product colors for jams.

The new signet-style Ann Page logotype will appear on all products in the Ann Page line, which includes such products as gelatin desserts, salad dressing, relish, mustard, vinegar, canned beans, soups, spaghetti, jams, preserves and jellies. Family identification is emphasized in this way—by means of identical color and shape, prominent lettering and dominant positioning—because the 30 or more types of Ann Page products are scattered throughout the store. At the same time, they are competing with the some 3,000 other products carried in the stock of the average supermarket today. This means that the shopper spending 30 minutes touring store aisles averages one minute for each 100 items. The label that creates split-second attraction and provides instant recognition of brand and product is, therefore, obviously the only type strategically designed for producing high-volume sales for Ann Page.

For this reason there is special significance in A & P's emphasis on maximum reproduction as a means of achieving the ultimate in eye-catching appeal, for it represents a deliberate gamble in terms of label costs vs. an increased sales volume that will justify the additional quality designed into and printed onto the coated-stock labels. This is true because the margin of packaging cost in a field as competitive as staple grocery commodities is drastically limited.

Color control stressed

As an aid to outside package designers, A & P's own printers developed a color chart showing the four basic colors and 44 combination colors that can be handled. The chart also indicates the sequence of color laydown to obtain the desired tint. The net effect of this color guide is to make the designer's selection of colors practical for printing as well as effective for sales.

To keep pace with the improvement in design and in the quality of the printing, increased attention is given to close control of color values. In this connection, the Flexichrome technique* is used in preparing the artwork from black and white photo-

* Eastman Kodak's Flexichrome Process.

NEW FAMILY of Ann Page products shows consistent use of the dominant "Ann Page" signet, with clear identification of each product—either through transparent window or by a printed reproduction of the product.

EARLY DESIGNS featured a practical jar shape, but gave little emphasis to brand name on label. They were ineffective for self service.

MODERN DESIGN, in effect for the last 12 years, gave bold product identification, but played down the brand name. The familiar cameo profile of Ann Page, which was introduced in about 1940, proved to be a weak trademark. It has now been eliminated, since the company felt that its use would make the compact new identifying emblem "headstrong."

graphs of certain products, such as canned beans, prepared spaghetti and gelatin desserts. This method, involving the painting in of various colors on a gelatin relief image, permits unusual freedom in adjusting color values. The method was not required in preparing the artwork for fruit illustrations on jam, jelly and preserve labels, since original paintings were involved in these illustrations.

A & P's attention to color detail in creating its new line of labels is based on the fact that performance in the store involves problems of lighting and background colors. For example, fluorescent lighting changes the appearance of blues and yellows, which come up strong, whereas orange fades off. Vivid background colors tend to drown out weak colors, etc. Therefore, each new A & P design is store tested thoroughly before approval.

Another reason for A & P's preoccupation with color detail—aside from the fact that maximum reproduction of lively colors does a better selling job on the container and also produces better ads—is the fact that company policy demands that every product photo or painting must accurately represent original products. The color values must be absolutely realistic.

It is also A & P policy to go all the way in meeting Government labeling requirements. Thus, use of the lid for required information is frowned upon by the company and the usual practice is to include mandatory data on the front label no matter how much these data may interfere with considerations of design and space. It is interesting to note, in regard to the preserves label, that the problem was effectively handled without sacrifice of design or merchandising effectiveness by making the required information serve as a frame for the rest of the label.

Excellent examples of informative labeling, of course, are provided by the labels for A & P canned vegetables and by the cartons now being used for spices and Ann Page dry grocery products. The vegetable can labels describe type, number of servings, etc., on side and back panels. The spice cartons list the specific uses of the spice on the backs of the cartons. This feature is intended to be helpful to the housewife, since there are many spices and often the homemaker will not know where some of them can be used most appropriately.

Ann Page origin

The new Ann Page labels are a fourth generation of one of the best known of all chain-store brands. The evolution of the label designs and the distinctive changes that have occurred reflect the dramatically changing attitudes of the homemaker and also the trend of A & P merchandising policy, which consistently has been, "Give the shopper what she wants."

The current design shows, too, how far the self-service trend has carried today's packaging of grocery products in the direction of streamlined identification and the premium placed on "take-me-off-the-shelf" appeal.

When the Ann Page brand was adopted two decades ago for promo-

tional use at Chicago's Century of Progress exposition A & P packages were designed primarily for over-the-counter sales. At that time the shopping pace was, of course, more leisurely than it is now.

The Ann Page brand was developed to provide greater feminine appeal for a growing family of products. The name itself has never been personalized, but about 1940 the cameo profile of a women's head was introduced to symbolize and identify the brand name.

The new brand largely supplanted A & P's famous, older "Rajah" brand, which by the early '30s had outgrown some of the effectiveness of its appeal suggesting far-away India and the romantic spice trade, in which A & P originally specialized. Also, the Rajah brand had evolved during a period when family identity was far less important than it is today. At that time A & P wanted the public to think of each item as an individual brand, because brands associated with A & P were not to be specially favored or promoted by the store clerk.

The late John Hartford, one of the brothers who founded and directed the policies on which A & P's success is built, adamantly resisted any attempt to convert his brands into A & P store brands. This policy was based, it is said, on his own experiences as a clerk, when he formed the conclusion that there was no better way to alienate a customer than to push a store brand, which might be regarded as a "substitute." Consequently, A & P's brands such as Rajah, Sultana, Iona and Ann Page have been developed not as A & P promotions, but for competitive merchandising of economical volume-produced, volume-distributed products. In self-service stores, of course, the brands are now more than ever before strictly on their own.

In the late '30s, Ann Page developed rapidly as a family-line brand and today includes more products than either Sultana or Iona, A & P's other major grocery brands. Ann Page preserves, for example, appeared in a squat, wide mouth jar in 1938. This container, designed on the basis of a survey made among women, had the appearance of cut glass and was intended for attractive serving at the table. A special feature was a crown cap with an attached, pry-up wire opening device. This jar at first employed a wrap-around label, which was later replaced with an embossed foil spot label. The new design lent itself well to attractive table use. The squat jar was not easy to tip, the label resisted staining and the cap was easy to remove and replace.

Sales, however, went down instead of up. Already the trend to self-service was being felt and the jars stayed on the shelves because they looked small in comparison with other 1-lb.-net-content containers.

This sales deterrent was eliminated by adopting the standard-type round jar—with more impressive proportion between height and diameter—that is still used today. A wrap-around band-type label was adopted in 1940 and also a new label design that functioned effectively until the introduction of the current spot label with full-color fruit reproduction on coated stock.

NOW, as shown by this close-up illustration of jam and preserve labels, the Great Atlantic & Pacific Tea Co.'s Ann Page line blossoms forth with a label design which offers a quality appearance and all the time-proven elements of successful, effective supermarket merchandising.

EARLY ATTEMPT at package improvement is shown above. The waffle-design bottle for chili sauce (right), introduced about 1939, is distinctive and creates the illusion of a larger bottle.

CREDITS: *Design of Ann Page labels, Egmont Arens, 480 Lexington Ave., New York. "Kromekote" label stock, The Champion Paper & Fibre Co., Hamilton, Ohio. "Vapor-Vacuum" closures, White Cap Co., 1819 N. Major Ave., Chicago 39.*

PACKAGING PAGEANT

1

1 An attention getter in curtain departments is this new carton appropriately designed to tie in with Framette window ruffling put out by House Beautiful Curtains, Inc. The effect of a house with overhanging eaves and chimney is achieved at no additional cost. Design, Alan Berger, New York. Carton, Service Carton Co., Brooklyn.

2

2 A new type of coconut product—Durkee's Dixie Cut Moist Coconut—introduced by Durkee Famous Foods Div., the Glidden Co., is more tightly packed, thus enabling more product to be put in each package. Label prominently features 5-oz. net weight and "25% more coconut." Cans, American Can Co. and Continental Can Co., New York. Labels, Wright Photo Off Set Co., New York.

3

3 Dominance of trademark, simplification of copy and an over-all appearance of cleanliness are achieved in this redesigned paperboard carton for White Bow Napkins, product of Sitroux, Inc. Peach and blue coloring is retained. White boxboard showing through oval tends to bull's eye brand name. Design, Robert I. Goldberg, New York. Box, Robertson Paper Box Co., Montville, Conn.

4

4 Newest hair preparation of Ogilvie Sisters is this "Magic Make-Up for the Hair," a paperboard kit for brush and jar of coloring for spot dyeing hair. Platform in the two-piece set-up box is die cut to hold glass jar; an elastic band holds brush. Box, Imperial Paper Box Co., Brooklyn. Jar, Hazel-Atlas Glass Co., Wheeling, W. Va. Cap, National Seal Co., Brooklyn.

5

5 The Hoffman House Dinner Club, a restaurant in Madison, Wis., is now packaging for retail sale one of its popular recipes—a red salad dressing. Package for Hoffman House Sauce is an

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oval glass jar with lithographed metal closure. Paper label reproduces the Hoffman House and the eight Hoffman brothers. Jar and closure, Anchor Hocking Glass Corp., Lancaster, Ohio. Label, Milprint, Inc., Milwaukee, Wis.

6 A colorful, re-usable Pliofilm drawstring pouch packages C. H. Masland & Sons' Cumberland "Be Safe" Deer Carrier and Safety Cross Straps. Illustrations show the deer hunter using the pouch as a container for hearts and livers and as a protection from dampness during the waiting period before the deer appears. Pouch, Shellmar Products Corp., Mt. Vernon, Ohio, using Goodyear Pliofilm.

7 Protective packaging of the Ferrara Confectionery Co.'s new Honey Nougats is reported to afford these candies unusually long shelf life. Candy pieces are first wrapped in wax-paper-lined embossed gold foil, then boxed in individual cartons which are put in a tray that slides into a carton. Carton is cellophane overwrapped. Packaging, Rossotti Lithograph Corp., North Bergen, N. J.

8 Functional jackets molded of ethyl cellulose plastic as the package for the new flashlight batteries recently introduced by the Bright Star Battery Co. are said to be chemically resistant and dimensionally stable. The case also minimizes danger of accidental short circuit in a flashlight, since the plastic is a nonconductor of electricity. Jackets are molded by the battery maker. Plastic (Ethocel), The Dow Chemical Co., Midland, Mich.

9 Barricini Summer-Ettes—pastel-colored chocolate candies—are fully visible in this combination plastic and paperboard box. Cover is of transparent acetate. Yellow acetate side is beaded to hold in the paperboard base. Box, Samuel Barnett Co., Philadelphia. Transparent acetate, Monsanto Chemical Co., Springfield, Mass. Yellow acetate, Joseph Davis Plastics Co., Arlington, N. J.

10 Fisher Flouring Mills Co. adopts a new approach to cake-flour merchandising with the package for its new Fisher's Special Occasion Cake Flour—a package that is as dainty, with its pastel coloring, as the cake illustrated on the box. Lithographed wrap, A. Carlisle & Co., San Francisco.

11 Applied color labeling has replaced paper labels on bottles packaging Eagle Chemical Co.'s Spra-Kill insecticide. Vinyl spray dispenser with each bottle is held in place by a dual ring on closure and dispenser. Bottle and metal cap, Owens-Illinois Glass Co., Toledo. Sprayer made by Calmar Co., Los Angeles, using Bakelite Vinylite. Sealing bands, American Viscose Corp., New York.

PACKAGING INSTITUTE FORUM

THE INSTITUTE IS READY FOR ITS 14TH ANNUAL MEETING, OCT. 20-22, WITH A FULL PROGRAM OF REPORTS AND PANEL DISCUSSIONS

Increased scope and activity of the Packaging Institute is reflected in an extensive program for the organization's 14th Annual Forum, which will be crowded into three busy days at the Hotel Commodore, New York, Oct. 20 to 22.

Ten seminars, one general meeting, two luncheons, a cocktail party and numerous committee meetings are on tap for members and guests of the Institute, which represents the production and technical interests of package users throughout the country. Nevertheless, according to R. Chester Reed, program chairman, the program has been arranged so that there will be little conflict of program interest, even though as many as three seminars will be in session concurrently. Attendance is expected to top 1,000 for the second straight year.

The Forum will open on Monday morning, Oct. 20, with the sole general session, at which the Institute's activities will be discussed, together with "Problems of the Atomic Age," which has been announced as the theme of this year's meeting. Robert deS. Couch, president of the Institute, will give the welcoming address and Charles L. Barr, former president, will present nominations for new officers and directors.

Following a luncheon meeting at which a folding-carton film will be shown, there will be three concurrent seminars Monday afternoon, dealing with Petroleum Packaging, Drug and Pharmaceutical Packaging and Food Packaging.

Tuesday morning will bring seminars on Printed Packaging Materials (continuing all day) and Adhesives. Scheduled for Tuesday afternoon is the first of two Production sessions. The annual cocktail party is at 5:30 p.m.

The second Production session is to be held on Wednesday morning, together with a seminar on Packaging Small Machines and Equipment. The final two meetings on Wednesday afternoon will be devoted to New Developments in Shipping Containers and Packaging Research and Development.

One of the features of the Forum is the "Atomic Luncheon" at 12:30 Wednesday, at which Dr. Philip W. Swain will speak and show color films of atomic bomb explosions. According to Dr. Laurence V. Burton, executive director of the Institute, the problem arising from nuclear fission will be shown to be directly related to packaging.

The development of packaging specifications is a topic of wide interest at the Drug and Pharmaceutical Seminar, the result of a year's study of the problem by this committee of the Institute. Statisical quality control will be the subject of another interesting session of this group.

All Forum sessions and functions are open to nonmembers as well as members of the Institute on payment of a registration fee. Employees of member companies and their subsidiaries may register at the member rate. Registrants may sign up for the full three days or for any one day. The Hotel Commodore has set aside rooms for out-of-town visitors.

The complete program follows:

Monday, October 20

9:00—Registration, Grand Ballroom Foyer.

10:00—(Grand Ballroom)—Call to Order by R. C. Reed, Program Chairman.

10:05—**Address of Welcome** by Robert de S. Couch, President, Packaging Institute.

10:45—**Report of Nominating Committee,** Charles L. Barr, Chairman.

11:00—**Progress and Outlook for Packaging Institute,** discussed by M. J. Odell of Koehler, Odell & Worden; H. Earl Nack of Sharp & Dohme, Inc.; Charles O. Kendall of E. R. Squibb & Sons; and John A. Warren of American Home Products Corp.

11:20—**Problems of the Atomic Age,** Paul Colsman of Brookhaven National Laboratory and Dr. W. A. Schenck of Riegel Paper Corp.

12:30—LUNCHEON—East Ballroom.

2:00—CONCURRENT SESSION—West Ballroom.

PETROLEUM PACKAGING. A. Douglas Murphy of Esso Standard Oil Co., Chairman. Report of work of subcommittees.

Tin Mill Product Qualities Required in Can Manufacturing, William B. Eastman of Continental Can Co.

Present Trends in High Speed Drum Manufacture, George S. Stothoff of United States Steel Corp.

Materials Specifications and Testing of Paper Containers, W. B. Lincoln, Jr., of Inland Container Corp.

2:00—CONCURRENT SESSION—East Ballroom.

DRUG AND PHARMACEUTICAL PACKAGING. Dr. John C. Bird of Lederle Laboratories, Chairman.

Statistical Methods and Their Value in Control of Packaging Materials, a panel discussion with Walter E. Spicer of Lambert Pharmacal Co., Moderator; Dr. Julian H. Toulouse of Owens-Illinois Glass Co.; W. A. MacCrehan of The Lord Baltimore Press; and Robert Mahan of A. H. Wirz Co.

Packaging Specifications: History, Development and Application, Dr. David M. Ashkenaz of Wyeth, Inc.

Developments in Plastic Containers for Packaging, Arthur R. Schettel of E. R. Squibb & Sons.

Status of Parenteral Closure Problems, John A. Elder, Jr., of Merck & Co., Inc.

Manufacture, Storage, Handling, Packaging and Shipping of Radioactive Materials, E. E. Beauchamp of Oak Ridge National Laboratory.

2:00–CONCURRENT SESSION–Parlors B & C.

FOOD PACKAGING. Dr. L. W. Elder of General Foods Corp., Chairman.

Packaging Materials and Packages—A Survey of What the Food Industry Seeks in Them, C. M. Woodcock of General Foods Corp.

Oil Freeness in Food Products—A Packaging Problem, Dr. L. E. Hoag of American Can Co.

How Far Should We Go in Solving the Food Caking Problem? Dr. R. A. Morck of R. B. Davis Co.

Odor Gain and Loss—A Package Permeability Problem, George Garnatz of Kroger Food Foundation.

5:00–(Parlor E) Meeting of Board of Directors.

Tuesday, October 21

9:30–CONCURRENT SESSION–East Ballroom.

PRINTED PACKAGING MATERIALS. E. H. Balkema of Colgate-Palmolive-Peet Co., Chairman.

Progress in Testing Fading of Printed Packaging Materials by the Fade-ometer, George Cramer of Sinclair & Valentine Co.

Further Progress on the Test for Effect of Alkali on Printed Packaging Materials, Albin H. Twardowicz of The Lord Baltimore Press.

Evaluating Resistance of Ink on Printed Packaging Materials to the Product in the Package, L. K. Burnett of The Ohio Boxboard Co.

Proper Ways to Handle and Store Printed Packaging Materials in the User's Plant, C. C. Sutton of General Foods Corp.

Should the Producer of a Printed Packaging Material Specify Its Storage Conditions and How It Should Be Handled For Delivery to the Packaging Line? W. A. MacCrehan of The Lord Baltimore Press.

Methods of Identifying Items To Prevent Or Catch Mixed Deliveries of Packaging Material. (Speaker to be announced.)

9:30–CONCURRENT SESSION–West Ballroom.

ADHESIVES. A panel discussion. Maurine Ponder of Joseph E. Seagram & Sons, Inc., Chairman.

Representing Users, Carr H. Parsons, Lederle Laboratories, and William Rite, Central States Paper & Bag Co.

Representing Suppliers, George W. Gray, Jr., of Arabol Mfg. Co. and William Sederlund of National Starch.

Representing Machine Manufacturers, Richard Wellbrock of New Jersey Machine Corp.

2:00–CONCURRENT SESSION–West Ballroom.

PRINTED PACKAGING MATERIALS (continued from a.m.).

Evaluating the Resistance of Printing Inks To Dry Rub, Lewis R. Ayers of Robert Gair Co.

Evaluation of Color-Master Differential Colorimeter In Color Control, F. L. Wurzburg, Jr., of International Printing Ink.

Evaluating Gloss of the Printed Package, T. Rosevelt of Sun Chemical Corp.

A Better Name For Aniline Printing—A Progress Report, John Cozza of Cello-Masters, Inc.

Evaluating Printability of a Material, B. A. Gaffney of New Haven Pulp & Board Co.

Profitable Uses of Codes On Packaging Materials, Ira Gottscho of Adolph Gottscho, Inc.

First In-First Out Control Of Use Of Packaging Materials, George J. Myers of Norwich Pharmacal Co.

Grain Direction of Labels For Sheet-Fed and Roll-Fed Labeling, Earl C. Lenz of Paisley Products, Inc.

Technical And Economic Factors In Printing On Glass. (Speaker to be announced.)

CONCURRENT SESSION–East Ballroom.

PRODUCTION. E. R. Hamm of Sharp & Dohme, Inc., Chairman.

2:00–**Maintenance and Repair of Packaging Equipment.** Speakers: R. Ross Kitchen of Charles H. Phillips Co. and Edward C. Towle of Sharp & Dohme, Inc.

3:30–**Planning and Purchase of Packaging Equipment.** Speakers: George D. Harrison of The Mennen Co. and Ralph Davis of Joseph E. Seagram & Sons, Inc.

4:30–**Useful Gadgets for Production Line Equipment and Packaging Machinery.** E. F. Dival, of Corn Products Refining Co., Chairman. Speakers to be announced.

5:30–COCKTAIL PARTY–East Ballroom.

Wednesday, October 22

9:00–CONCURRENT SESSION–East Ballroom.

PACKAGING SMALL MACHINES AND EQUIPMENT. R. D. Courtright of International Business Machines Corp., Chairman.

Packaging of Sound Recording and Reproducing Equipment, J. R. Hopkins of Dictaphone Corp.

Packaging of Photographic Equipment, C. M. Elliot of Eastman Kodak Co.

Packaging of Cash Registers in Corrugated Cartons, M. W. Barnell of National Cash Register Co.

Packaging of Punched Card Accounting Machines. Mr. Courtright.

9:30–CONCURRENT SESSION–Grand Ballroom.

TRAINING PROGRAMS AND PROCEDURES FOR PACKAGING LINE PERSONNEL. John A. Warren of American Home Products Corp., Chairman.

Selecting and Training of Personnel—the Key to Cost Reduction, Clarence T. Genovese of Dunlap & Associates.

Training of Packaging Line Mechanics, E. W. Love of Bristol-Myers Co.

Training of Packaging Line Supervisors, E. J. Capstack of Joseph E. Seagram & Sons, Inc.

12:30–LUNCHEON–Grand Ballroom. Speaker, Dr. Philip W. Swain: **"Plain Talk on Atomic Power and the Atom Bomb"** and color movie of atomic bomb explosions.

2:00–CONCURRENT SESSION–Grand Ballroom.

NEW DEVELOPMENTS IN THE SHIPPING CONTAINER FIELD. Allyn C. Beardsell of Container Laboratories, Inc., Chairman.

Vacuum Sealing of Siftproof, Seal-End, Folding Cartons, William J. Cupo of Johnson & Johnson.

Evaluation of Cushioning Media for Interior Packing, John L. Gretz of The Sponge Rubber Products Co.

New Closure Regulations in the Uniform Freight Classification, George J. Keyes, Member, Classification Com.

Glued Lap Joints on Fibre Containers, Alfred N. Hoffman of Container Laboratories, Inc.

Tuf-Edge and Tuf-Wall Corrugated Fibreboard Containers, Arthur Moscowitz of Shelton Manufacturing Co.

2:00–CONCURRENT SESSION–East Ballroom.

PACKAGING RESEARCH AND DEVELOPMENT. Charles M. Woodcock of General Foods, Chairman.

Supported Plastic Films and Their Proper Uses, L. F. Swec of H. P. Smith Paper Co.

Proper Specification for Blow-Molded Polyethylene Containers, James H. Parliman of Plax Corp.

Engineering the Adhesion Operation, Dr. Frank C. Campins of Polymer Industries, Inc.

How to Predict Shelf Life from Packaging Laboratory Data, Ross A. Easter of Pillsbury Mills, Inc.

THE CASING that licked the shrinkage problem

YOU CAN CUT SHRINKAGE LOSSES UP TO 97% with PLIOFILM casings for meat loaves, luncheon loaves, boiled ham and similar products.

That's a proved fact—and it's one big reason why so many brands are now using this puncture-resistant, moisture-protective film. But it's not the only reason.

PLIOFILM saves labor costs, too, because it slices easily without shattering—doesn't dull knives. PLIOFILM's clear transparency permits enticing display, speedy sales. And PLIOFILM prints clearly and sharply in multicolors, provides excellent brand identification.

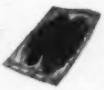
You'll find PLIOFILM ideal for all kinds of meat products, especially rough, bony or irregular items like rib roast or poultry.

If you're not yet using this sparkling sales-maker, it'll pay you to get the facts now. Write Goodyear, Pliofilm Dept., Akron 16, Ohio.

We think you'll like "THE GREATEST STORY EVER TOLD"—Every Sunday—ABC Network

COULD YOU USE THESE PLIOFILM ADVANTAGES?

IT'S STRONG! PLIOFILM produce bags hold up to 10 pounds without danger of breakage.



IT'S LIQUIDPROOF! PLIOFILM is so moisture-tight, leakage-proof, it safely seals pickles, sauerkraut, in their own flavor-making brine.

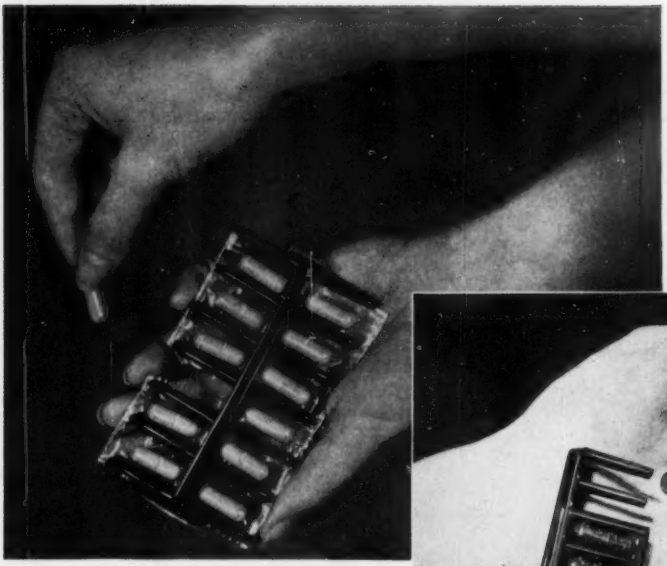
IT KEEPS MOISTURE OUT! Crackers, tablets and other hygroscopic products stay crisp and dry in PLIOFILM.

Good things are better in *Pliofilm*

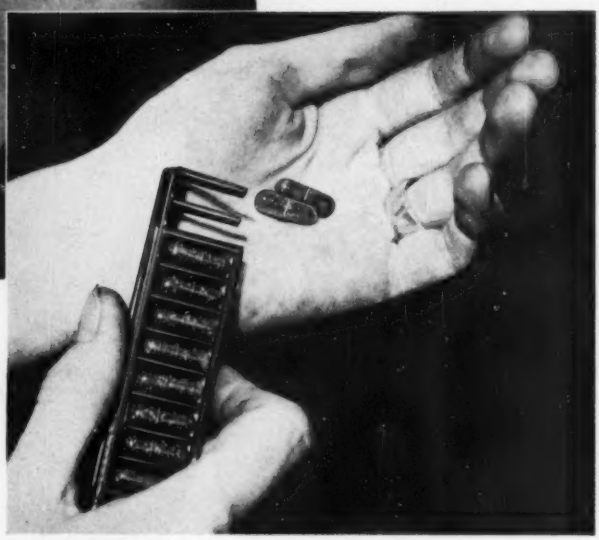
GOODYEAR PACKAGING FILM

3-way protection against air, moisture, liquids

Pliofilm, a rubber hydrochloride—T. M. The Goodyear Tire & Rubber Company, Akron, Ohio



HAND-SIZED container features toothed strip providing separate partition for each capsule when sealed over transparent film envelope. One of the capsules can be ripped off the strip at a time.



SLIDING COVER over the comb-shaped piece provides a convenient compartmented package that can dispense the capsules individually.

Capsule ideas

THESE PLASTIC DISPENSING CONTAINERS FOR CAPSULES MAY NEVER REACH THE PRODUCTION LINE — BUT STUDENTS' DESIGNS DO OFFER INSPIRATION

Students of packaging can rush in where angels fear to tread and their fresh, uninhibited thinking often has excellent idea value—if not always completely practical from the production and sales angles.

Unhampered by the engineer who says it can't be done, the purchasing department which says it costs too much and the research director who claims you can't buck consumer preferences, the student can give free rein to his design thinking—sometimes coming up with a solution to a problem that seasoned old timers would never have thought of.

Students of the Institute of Design of Illinois Institute of Technology were recently given a problem to design a plastic container for the "vitamin capsule of tomorrow." Each student designed a package to solve a particular aspect of the problem, with special attention to plastic material, plus such factors as cost, ease of handling and product protection.

Harold Cohen, instructor at the Institute of Design who taught the project, explained the approach. It was the feeling, he said, that plastics have not been fully exploited by manufacturing. Only its transparency has been widely used; otherwise it appeared to the students that the material has been employed as if it were metal or paperboard. Because of its flexibility and color range, he said, plastics offered many unexplored possibilities production-wise.

In their designs the students attempted to use all of the advantages of the materials they worked with. Original solutions to the problems of capsule container designs are offered in six new container models created by third-year students, four of which are illustrated on these pages.

To solve what he termed "hygienic problems," Leonard Seeley, 611 Richmond Ave., Chicago, devised a hand-sized container for 12 capsules, comprised of two matching molded strips which could be made of acetate or polystyrene, equipped with tooth-like projections on each side serving as dividers that form a separate compartment for each capsule when the two molded pieces are sealed together over an envelope of transparent film. One capsule can be ripped off at a time, while the others are kept protected until used.

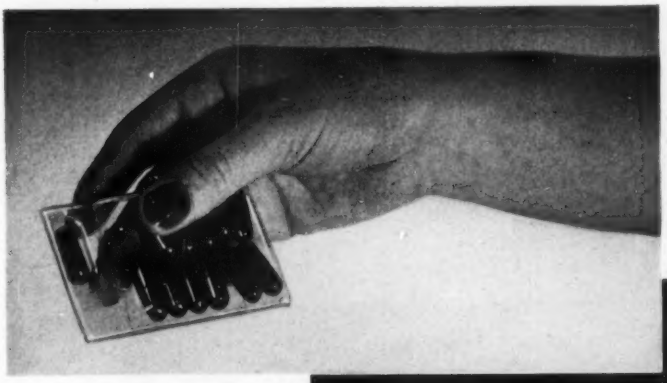
By means of a comb-shaped piece of opaque plastic and a transparent sliding cover, Charles Weil, 1129 N. Dearborn St., Chicago, made a one-handed dispensing container. Capsules are secured between wide-spaced teeth of the comb-shaped piece due to the natural-spring property of the plastic material. Each may be dispensed separately as the thumb operates the sliding cover.

A transparent dispensing container was devised by Carl Gibson, 29 Pinehurst Ave., Natick, Mass., to feature easy loading and dispensing. It is comprised of two parts: a formed base with an individual recess for one capsule and a sliding cover. By means of the well, just one capsule is dispensed at a time when the thumb-operated cover is pulled back by the user.

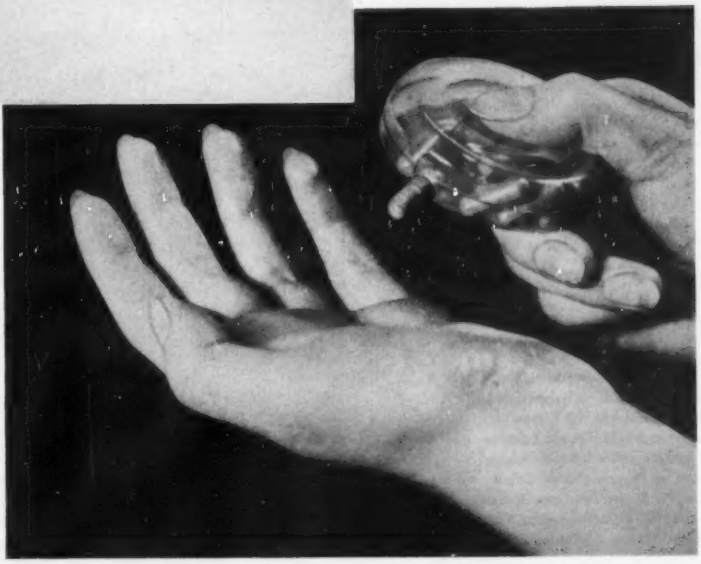
A two-piece formed and cemented round container made of transparent sheet plastic was devised by Gene Szymczak, 924 W. 51st Place, Chicago, using the flexibility of the plastic so that a slight pressure with thumb and index finger dispenses one capsule at a time through a small hole in the side.

Other designs included a circular container conceived by Harold Grosowsky, 8 Erie St., Chicago, on which the days of the week are indicated as a reminder of whether or not the user has consumed his daily dosage. Problems of retail costs were studied by Gordon Goodrich, 48 E. Bellevue Ave., Chicago, for a large plastic container which he figured to be favorably competitive in price to a glass container.

It is reported that several industrial firms have shown interest in this student project. The students were assisted by, in addition to their instructor, Elic Nekimkin, former faculty member of the Institute of Design, who collaborated with Moholy-Nagy, founder of the Institute, on the design of the Parker-51 pen.

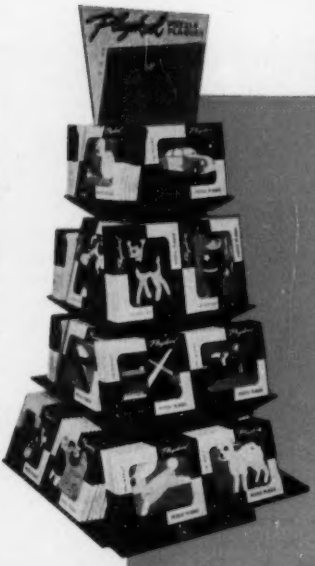


RECESSED WELL in base permits convenient dispensing of one capsule at a time when the cover is slid back from the tray.



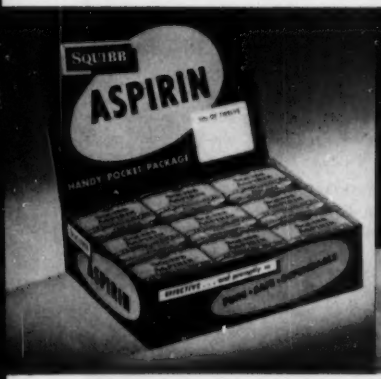
SLIGHT PRESSURE permits dispensing of the individual capsules through hole die cut in the side of this circular transparent container.

DISPLAY



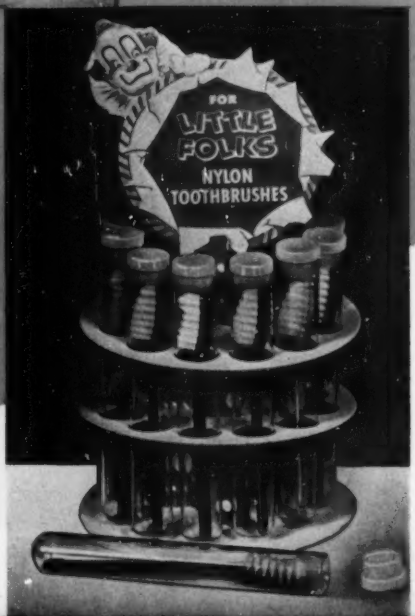
Approximately 210 Playskool Puzzle Plaques, a new product recently introduced by the Playskool Mfg. Co., are accomodated for display position in this corrugated floor stand. The sturdy unit is capable of supporting over 200 lbs. on its four shelves which taper to a height of 5½ ft. from a base which uses only 4 sq. ft. of floor area. The display folds flat for shipment. Display, Container Corp. of America, Chicago.

Three basic problems of stocking presentation for department stores are solved by this blond mahogany display merchandiser: lighting, costume coordination and "feel" of product. Larkwood Hosiery's new counter unit provides daylight illumination behind a glass fibre shade to eliminate glare. Color-coordination cards are removable for renewal each season. Display, Robert Kayton Associates, New York.

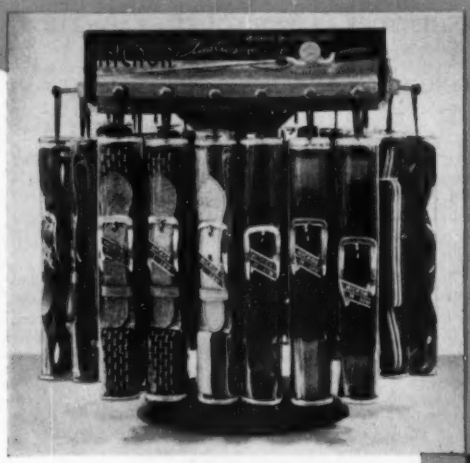


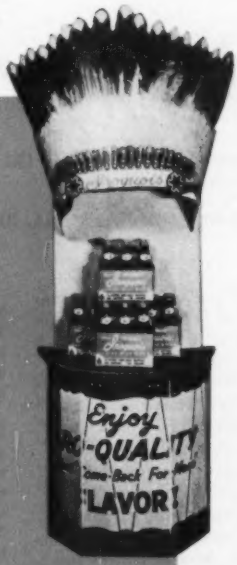
Stepped-up design to meet increasing self-service selling on drug counters is indicated by these new Squibb Aspirin displays. While retaining the dignity of the Squibb name, the rich maroon, brown and buff coloring of the 12-tin unit commands immediate attention. The other unit features a special offer efficiently packaged together in a die-cut paperboard boot—a bottle of 100 and a tin of 12. Cartons, Atlantic Carton Corp., Norwich, Conn. Design (12-tin display), Gilbert Banever, New Haven, Conn.

This clown display for "Little Folks" nylon tooth brushes by I. Sekine Co., Inc., makes a direct appeal to the juvenile trade. A dozen glass-tubed brushes fit into this circular, die-cut paperboard self-vending unit. It is only 5 in. in diameter and less than 10 in. high, including clown and hoop top piece. Display, Einson-Freeman Co., Inc., Long Island City, N. Y.



GALLERY

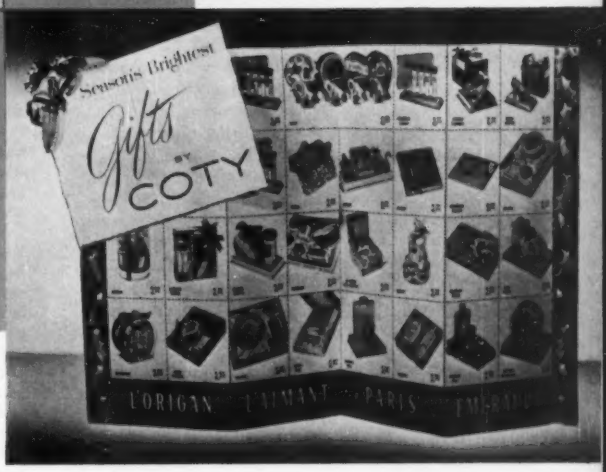




Reproduction of the Indian headdress on this floor display for Iroquois Beverage Corp.'s bottled beer quickly establishes a tie-in with the brand name, Iroquois Indian Head Beer. Base resembles a drum. The unit may display either six-bottle cartons or loose bottles. Display, River Raisin Paper Co., Monroe, Mich.

To aid shoppers in selecting Coty products as Christmas gifts, this "see at a glance" four-panel window display shows 27 full-color illustrations of Coty gift items, plainly printed with prices. This "window catalog" is a five-scored panel 60 in. wide and 39 in. high. It can be expanded or collapsed to fit large or small windows. Dealers feel it will help speed up cosmetic gift-counter traffic. Display, Einson-Freeman Co., Inc., Long Island City, N. Y.

Hickok's revolving swing display for the new Hickok elastic belts has a neat look. It holds 3 doz. belts, each in a transparent acetate tube with circular paperboard top and bottom. Two tubes hang by braided cord loops from each of the 18 brass pegs set in the triangular Syrocowood top. The unit revolves when touched. Display, Syracuse Ornamental Co., Inc., Syracuse, N. Y. Plastic tubes, Clinwill Plastics, Inc., Buffalo, N. Y.



Six related cosmetics of other manufacturers are promoted in this compact unit by Cutex promoting its new "Red Hot 'n Blue" nail polish and lipstick. Theme of the unit is that used in Northam Warren's national-magazine advertising and it features a full-color adaptation of the Cutex ad, framed by copy for the related items. Display, Lutz & Sheinkman, New York.

Significant of the trend to popular-priced, small-boxed "nibbler" units of quality confections is this wire display stand and counter carton for Whitman's new Small Package family, now appearing near cash registers in drug, department and stationery stores. Packages carry silhouette of Whitman messenger boy trademark, its first use on a package other than the Sampler. Display, All Wire Metal Products, Philadelphia. Box wraps, C. H. Forsman Co., New York.

Western Show report

WITH 8,000 VISITORS AND 152 EXHIBITORS AT THE FOURTH EXPOSITION, LOS ANGELES BREAKS ALL RECORDS FOR THIS WEST COAST EVENT

Mutual interests in packaging drew nearly 8,000 persons, mainly from the 11 states west of the Rockies, to Los Angeles Aug. 12 to 14 for the fourth renewal of the Western Packaging Show.

The show far surpassed all of the three previous Western expositions, held in 1948, 1949 and 1950 in San Francisco, in both attendance and number of exhibitors. There were 152 firms listed as exhibitors, as against 100 on the last previous occasion, and total registrations were announced as 7,900, compared with 5,100 at San Francisco in 1950.

With ample exhibit and crowd space on the main floor and mezzanine of the Shrine Convention Hall, the show was generally voted a great success by both exhibitors and visitors. Noticeable this year was increased emphasis on materials-handling equipment, as evidenced by the name, Western Packaging and Materials Handling Exposition.

In general, the show was a miniature of the annual National Packaging Show, but with special attention to those phases of packaging which are especially important to the Western states—fresh produce, dried and citrus fruits and the food industry in general.

Staged and managed by the New York firm of Clapp & Poliak, Inc., which also manages the National Packaging Show of the American Management Assn., the Western Show was supported by the Western Packaging Assn., which furnished an Advisory Board; by the Los Angeles Chamber of Commerce and by other interested groups.

Held concurrently with the show, on the mornings of the second and third days, was a Packaging and Materials Handling Institute, sponsored independently by the Industrial Engineering Department of the University of Southern California.

If there were any criticisms at all of show arrangements, they had to do with the conference, or Institute, which wandered pretty far afield from consumer packaging. Unlike previous national and Western shows, the conference program was not presented in the exposition building, but in a University building about a half mile away. The program did not attempt to cover the broad field of packaging interests, but was devoted to two special subjects: military packaging of the type involving primarily the aviation industry and materials handling of a general nature.

Abstracts of those papers which are of interest to packagers follow:

Recent Changes in Basic Air Force Packaging—RAY PASS, *Chief, Packaging Section, Quality Control Directorate, Western Air Procurement District, Air Materiel Command, USAF, Los Angeles.* Ordinarily, Mr. Pass said, the would-be AF contractor first encounters references to AF packaging and packing in the "Invitation for Bid." Incorporated in the Invitation is the so-called "Contractual 163 Form," a page telling just how the AF desires the items to be packaged, preserved, packed and marked. A copy of this form is also incorporated into the contract when it is awarded.

A revision of this "Contractual 163 Form" is now appearing in contracts. The old document consisted of a 163 Form, a 163A Form or a 163C Form—all dated July 1, 1950. The 163 applied to most of the items procured by the AF; the 163A was used when special materials such as fuels, chemicals and oxygen ware procured.

The new form consists of four parts—163, 163A, 163C and 163D—all dated Jan. 22, 1952. The 163 and 163A supersede the old 163 and 163A. 163C is a new form, Mr. Pass explained, which contains the item-identification and container-marking specifications formerly included in the 163 and 163A forms. It also contains an additional paragraph entitled "Reinspection Requirements," which requires (when applicable) the contractor to mark each container with the inspection date for preservation. The date will either be called out on the 163C form or have to be obtained from ANA Bulletin #405.

The 163D form contains information with regard to establishing preservation and packaging lists for spare parts. This procedure involves the use of 163B forms and is commonly known as a "PT List." Many contracts will not require use of all four forms.

Mr. Pass directed attention to some of the changes in the new forms. Form 163, as printed, contains a statement to the effect that "items will be preserved and packaged in accordance with AN-P-13." Just after the forms were printed, AN-P-13 was superseded by MIL-P-116A.

Paragraph 3 of Form 163 deals with spare-parts-packaging lists (PT lists). Previously it called for the lists to be established in accordance with AMC Reg. 71-1. Since that regulation was primarily for Air Force use, the contractor had difficulty in obtaining the information it contains. Now, when necessary, this data will be supplied as part of the contract.

The old 163A form had a paragraph for specifying "Commercial Preservation, Packaging and Packing." This paragraph has been omitted from the new form. If desired by the AF, commercial packaging can be specified by special notation on the form.

The various paragraphs on the back of the 163 form also have undergone revision. JAN-P-104 export shipping containers may now be used, in addition to the JAN-P-105, JAN-P-106 and MIL-C-6057 containers previously permitted. There is a provision for omission of case liners in export shipping boxes under certain specific conditions; these conditions appear to be more liberal than those on the old form. Unless otherwise specified, domestic shipping containers must conform to certain listed Federal specifications, such as NN-B-601, NN-B-621, LLL-B-636, etc. Since the old form, in general, allowed use of containers built to meet Consolidated Freight Classification rules, new requirements are more restrictive. The maximum gross weight for a Type 1 load shipped domestically in fibreboard containers was formerly 70 lbs. Now no gross weight is mentioned for such shipments; the weight, therefore, may equal the load as specified on the manufacturer's seal. However, this is not to be confused with the 275-lb. Mullen test requirements.

The identification and marking information which formerly appeared on the 163 and 163A forms has been deleted and appears on a separate form, 163C.

The new form 163C, which deals with item identification and container marking, stated originally that physical items should

be marked in accordance with specification AN-M-13. Since that printing, the portion of AN-M-13 pertaining to item marking has been superseded by a new specification, MIL-M-7911. Until the present supplies of 163C forms are exhausted, they will appear in the contract with AN-M-13 crossed out and MIL-M-7911 inserted. Marking of interior and exterior containers is to be in accordance with MIL-STD-129. It will be noted that AN-M-13 is now entirely superseded. These are some but not all of the changes in the Contractual 163 Form.

Mr. Pass mentioned that the new 163 form will require packaging and preservation in accordance with MIL-P-116A and AN-P-13. In the past, the contractor would phone and say, "My contract specifies a Method 1A8 as per AN-P-13 and I can't find it in the spec." He can't because it wasn't in the specification. Method 1A8 will now be found in MIL-P-116A. The old Method O is also in the new specification, but is called Method 3.

Methods of preservation which are essentially waterproof are listed as 1A, 1A2, 1A8, etc. Essentially water-resistant methods are listed as 1C methods. So now Method 1A3 will be known as 1C1. One of the differences in the specification is the amount of testing required. Tests are required on "pilot packs," routine production packages and packages utilizing different basic methods. A wider variety of tests is now required.

Since the new documents have been in use only a short time, Mr. Pass felt that it was still too early to say what problems or difficulties will be encountered in their use. It is apparent, however, that the contractor must read and understand his contract and the referenced specifications with even more care than before. Any questions or problems should be discussed with AF personnel. This should be done as soon as possible, Mr. Pass urged, since it often takes considerable time to obtain classification.

What to Consider When Bidding a Government Contract—RALPH C. BUTLER, *General Manager, Aircraft and Export Packaging Division, Lyon Van & Storage Co.*, Burbank, Calif. Mr. Butler pointed out that as a result of the magnitude of the war production program, many small contractors now have the opportunity to bid on Government contracts for the first time. The packaging requirements of the Government are very rigid, and rightly so. Therefore, when the contractor is estimating the cost of packaging his product, he should follow a few simple rules to avoid the pitfalls awaiting the inexperienced packer.

The first rule laid down by Mr. Butler is that the contractor should employ someone familiar with Government specifications to interpret his packaging requirements as called out on the invitation to bid. If the contractor has a small organization and cannot afford to employ such personnel on a permanent basis, he can call on a reliable packaging company to furnish him assistance in preparing his bid.

The second rule the contractor should follow in preparing his bid, according to Mr. Butler, is not to submit a bid based on employing shop carpenters, maintenance and/or excess labor to fabricate the containers. The bailing of shipping containers is a trade requiring training and should be entrusted only to experienced workmen. When shop personnel not experienced in packing and crating to Government specifications are employed to build containers, they often think that the container specifications are trivial. However, Mr. Butler warned, rejections by Government inspectors after the containers have been built can be a very significant item in the packaging cost. Employment of inexperienced personnel in the fabrication of containers can result in container rejection for any one of the following reasons: too much moisture in lumber; divergence in grain of lumber; lumber not of proper quality as to grade and thickness; wrong size nails; nail pattern incorrect; box design not correct for type of load; and box liner not installed before items were packaged.

If the contractor at the time of submitting his bid employs a competent and experienced packaging engineer to interpret correctly the Government specifications, this pitfall can be avoided.

A third rule is that the contractor must not miscalculate the cost of interior packaging from the standpoint of either labor or materials. He should first check thoroughly on the cost of set-up boxes and cartons, especially if his contract requires that he procure them in small quantities. Foil barriers for interior packing are another pitfall for the small contractor. He may find too late that he cannot fabricate his barrier material into moistureproof bags in his own plant without approval by the proper Government agency. To get this approval he must obtain laboratory tests of sample bags. These laboratory reports, together with more samples, must be forwarded through Government channels to the approved agency. This procedure is costly and approval usually requires 60 to 90 days. Consequently, it is usually more economical for the small contractor to purchase these foil barriers from a source of supply approved by the Armed Forces.

Another cost, which Mr. Butler said is often overlooked by the small contractor, is the expense of cyclic exposure and drop tests. Before submitting a bid, the contractor should ascertain what tests will be required of his packaged material. These tests, when required, can substantially increase the cost of packaging. Still another frequent miscalculation of the bidder is failure to include in his estimate the shipping or carloading costs. Of course, all experienced contractors know that nothing is ever shipped on Government contracts until the weight of the paper work involved equals the weight of the article to be shipped. Therefore, the contractor should remember when estimating his bid that he will have paper work to handle. One of these pieces of paper is a Certificate of Conformancy. The manufacturer must request these certificates on all materials delivered to him and must retain them in his files for inspection purposes.

The standard clause in supply contracts gives the Government the right to inspect the material involved during and at completion of manufacture and to reject or require correction of defective articles, material or workmanship of manufacturing or packaging. Failure to comply with these requirements can cause the contractor added cost and time, and any attempts made to cut corners on packaging cost only result in expensive failure and loss of prestige with the procurement agency should the bidder desire future contracts, Mr. Butler warned.

The bidder should always remember that the pitfalls that occur from bidding on Government contracts can become quicksand if he is the successful bidder who has underestimated the true costs of the contract.

Military Packaging From a Manufacturer's Standpoint—J. D. NUNN, *Manager, Shipping Department, Lockheed Aircraft Corp., Burbank, Calif.* The announcement of this discussion indicates that I am to discuss the activity of the manufacturer *after* his receipt of the military contract. Digressing for the moment, Mr. Nunn said that it must be presumed that a manufacturer has taken considerable action *prior* to his receipt of a contract. This prior action has a very important bearing on his ability to perform efficiently once the contract is in his hands. Answers must be found to a battery of questions, such as: What facility problems are imposed? Will the present packaging area suffice? Will the area—space and layout-wise—permit the installation of special equipment? What special equipment will be required? What materials must be procured? Are approved sources of material readily available? Can the source readily supply the specification materials? Are there critical materials involved which will require priority ratings?

Assuming that the manufacturer has negotiated his contract and is about to initiate performance, he probably should attack first the details of preserving and packaging the product or products. The manufacturer who habitually exceeds requirements by preserving hardware as he would bearings, for example, will afford the product adequate protection. He will, however, dig deep into his pockets to pay the tariff. Conversely, the manufacturer who preserves bearings as he would hardware finds either that he has encouraged difficulty with the

local Military Quality Control Representative or that unsatisfactory reports are received from the field.

The method of preservation may be predetermined by the contract itself and the manufacturer may not be allowed to exercise discretion in selecting the method of preservation for his products. The contract may specifically spell out each packaging step or, as an alternative, the contract may require conformance to certain specifications. The specifications with which a manufacturer might be involved, I am afraid, are many and varied. However, the Government publishes an index of specifications and the Quality Control Section of the Western Air Procurement District will assist those who need the index and/or any certain specification, Mr. Nunn claimed.

A second alternative gives the contractor some area in which to exercise his discretion. It is the establishment of the manufacturer as an approved packaging representative of the military. Each contractor so qualified is assigned a PTA (Packaging Team Approved) number which is called out in each contract issued to him. The contract simply states that the preservation and packaging shall be in accordance with PT number "X." This number not only represents the military approval of the contractor but, in addition, identifies the Air Force-Navy Aeronautical Standard Preservation and Packaging List which the contractor must prepare and which is subsequently approved by the military. Under this arrangement, the manufacturer analyzes each product which he will ship and prepares a recommendation of the method of preservation which will be employed.

This recommendation is set forth in what is called a Packaging Information form. A separate card is submitted for each and every part, and these cards form the Standard Preservation and Packaging List. Despite the fact that conformance to the numerous specifications may not be expressly demanded in the contract, each of the specifications must be used as a guide. The intent, if not the letter of the law, must be implied and/or reflected in the make-up of the Packaging Information form, Mr. Nunn said. The greatest advantage in this arrangement is the standardization achieved and the elimination of research each time a given part is processed.

Aside from the basic descriptive data that go into the Packaging Information form, information pertaining to the cleaning, preserving and packaging is developed by setting up a pilot pack of the pertinent art. These pilot packs may be subjected to the numerous tests prescribed in specification MIL-P-116A. These involve the rough-handling test, the cyclic-exposure test, quick-leak test and others. Of course, before the pilot-pack stage, the manufacturer must be in a position to verify that his preservation and packaging material inventory conforms to the materials specifications. This he will do by maintaining on file copies of the certificates of conformance which he has required his suppliers to submit. In addition, it is always a good practice for the manufacturer periodically to conduct in his own approved laboratory (or in a commercial laboratory that has been approved by the military) conformance tests on representatives samples of his inventory.

I believe that I can summarize in three sentences what I have been saying, Mr. Nunn concluded:

(1) The manufacturer should know exactly what his obligations under the contract will be.

(2) He should make provisions—space, equipment, manpower and materials—to discharge these obligations.

(3) He should, if he desires to be successful, assure himself as well as the military agencies that he is able to meet fully the standards which the contract requires.

Trends In Military Packaging—Lt. Col. Robert W. Johnson, *Chief, Packaging Section, Air Materiel Command, USAF, Wright Patterson Air Force Base, Dayton, Ohio.* Although one of our prime and basic policies calls for maximum coordination with the other services in our Department of Defense, I elect at this time to confine my discussion to that phase of military packaging as it concerns the Air Force. You will understand, then, that the policy matters I mention are Air Force policies.

Prior to the last war American industry had had no experience which would prepare it adequately for the demands of wartime export shipment and long-time storage which were so suddenly thrust upon it. It did not possess the necessary knowledge, manpower or equipment with which to do the job. The military services, as a consequence, were forced to initiate research into methods, techniques and materials and, at the same time, to assume in the depots a tremendous job of repackaging material improperly prepared by industry for military handling.

Because of the exigencies existing during World War II, it was our policy to apply corrosion-control treatment to all items subject to deterioration by rust or corrosion during storage and shipment. This policy, while expensive because of the level of treatment given many items used locally and within a short period of time, was justified as a war measure. At the end of hostilities, however, it became immediately apparent that to continue this policy during peacetime was absurd, even though it might be wise to maintain a reserve stock of treated items in readiness for a possible emergency. With this in mind, a new policy was established which required depots to maintain a specified percentage of items (in which they were specialized) preserved at the level necessary for extended storage and overseas shipment. All other stocks on hand, in excess of the level treated in accordance with the requirements for extended storage and overseas shipment, were given only the amount of economical preservation necessary to prevent deterioration under local conditions. This policy was continued in effect until January, 1950. Although this policy was sound in principle, manpower shortages in our depots and the ever-changing supply requirements caused AMC Headquarters once more to review the corrosion-control program and adopt the policy now in effect.

In so far as depot operations are concerned, the existing plan of operation places with the air materiel depots and specialized depots the full responsibility for corrosion-prevention treatment and for packaging and maintaining in storage and for overseas shipment a sufficient stock to meet known or anticipated overseas requirements, with no reference in the policy to specific percentages or quantities. Under this policy each depot is in position to schedule items and establish priorities for treatment according to individual needs and requirements.

In order to equalize the work load and to relieve depots as much as possible, it is also the policy of the Air Force to assure that all items currently being stocked, which are subject to deterioration or damage in shipment or in storage, without regard to destination, will be afforded preservation and packaging at the level found necessary to withstand overseas shipment, utilizing procedures and methods and materials prescribed by our technical orders and specifications. When it is known, however, that the item is scheduled for domestic shipment only and for covered storage for a period of 180 days or less, or for current use upon arrival at a known destination, the level of protection of preservation and packaging may be lowered to that considered consistent with the anticipated hazards of shipment, storage and handling.

The situation obtaining today, however, calls for a new approach to the problem. American industry employs thousands of people in packaging and materials-handling activities, and millions of dollars have been spent on research, materials and equipment. For the Air Force to retain its policy of World War II would constitute a duplication of effort and, to that extent, a gross waste of the nation's manpower. For these reasons, the Air Force has adopted a policy of full utilization of industrial capabilities, taking the greatest possible advantage of industry's potential sources of trained personnel, packaging facilities and the vast collecton of packaging and materials-handling knowledge gained during and since World War II. This policy dictates the preparation of the maximum amount of Air Force material for export shipment and long-time storage by industry, with a minimum of repackaging required by USAF activities. It includes the use of industry's knowledge and en-

gineering capabilities to produce adequate standards, with a minimum of effort expended by Air Force engineering personnel in reviewing these standards for approval.

In light of the development of national and world-wide economic conditions, Col. Johnson said, I think that never again will we be able to create and maintain huge outdoor stockpiles of war material for combat activity. The uncertainty of the international situation and the current stresses to which our national economy is presently being subjected make the furtherance of such a concept impossible. If we are to maintain a position of constant combat readiness, prepared to move in any direction on any front, we will have to work on a hand-to-mouth basis in so far as pipeline length is concerned. This means, then, that we are faced with the necessity of devising the lightest and most inexpensive types of packaging for aerial delivery of war materiel direct to using organizations. This does not mean that we still cannot foresee the requirement for packaging suitable for beachhead operations, for outdoor storage or for shipment by water and surface forms of transport, but we can foresee that a larger portion of our supplies will move by air.

We find then that we now have under consideration two extremes: at one end, the ultimate for beachhead-type operations and, at the other, the minimum for direct aerial delivery. It will assist us in formulating our policies if we will remember that items used in great abundance, such as petroleum, clothing, subsistence and ammunition, comprise roughly 80% of our total tonnage, but represent only 20% of our dollar expenditures. This consideration leads us to the conclusion that we can very well afford to consider aerial delivery for that remaining 20% portion of our total tonnage, which represents an investment of 80% of our dollars. If we make a decision on this basis, I personally think it will give us a far less complicated solution to the problem of determining what and when we should package to the minimum standards. In this latter case we can safely use the lightest box and most inexpensive type of preparation for shipment because we will not make aerial delivery until those supplies are needed and should, therefore, anticipate no long overseas storage.

Col. Johnson brought out another basic factor which must be taken into account: the absolute necessity for simplicity and for standardization. The instructions and the specifications which we use and the materials and methods which we specify must be easy to understand and follow and be supported by a reasonably adequate supply of available material. Roughly 75% of our items are, comparatively speaking, fairly regular in shape, reasonably small in size, simple in design and present no particular packaging problem. Such items, then, must be identified by their physical characteristics and so segregated and catalogued that the packaging for all of those items may be determined once and for all. When this is completed, we will then be in position to devote to the remaining 25% of our items the packaging engineering talent and techniques they merit.

Col. Johnson believes that consideration of one more major factor will put us on a firm basis for formulating those policies which will establish the trend of military packaging. Up to the present time it has been the packaging technician's objective, by and large, to protect his item against all foreseeable hazards to include those created by the hand of man. From a management point of view, I concern myself with the possibility of eliminating such of these last hazards as are conceivably subject to control. If it is possible to do this, it means that I can lower somewhat the levels at either of my packaging extremes with a consequent direct benefit to all of us as taxpayers and citizens. This means that we must eradicate from the minds of our Air Force people that long-instilled habit of playing free and easy with military property.

We cannot consider the introduction of more than one standard unit package into our logistical system now. There is no way known to us by which we can determine whether an item being manufactured and packaged for the Air Force in your plants is to be consumed in the Zone of Interior, shipped overseas for long-term storage or expended in combat activities. Our selection of means to reduce weight and cubage for airlift or of means to provide maximum protection for a beachhead is limited practically to the shipping container and the packing methods. Under our present supply system we must, therefore, depend to the maximum possible extent on industry to accomplish our basic preservation or unit pack and on our own depots for the application of appropriate packing at the time when shipment is to be made to a known destination by a specified means of transport. This, then, is one of our basic policies. In order to achieve the simplicity and standardization which we have determined as essential, the Air Force is presently engaged in its project for categorization of items by physical characteristics in order that an appropriate packaging decision may be made.

When these projects have been completed, we will have a set of packaging instructions which are easy to understand, which provide the maximum degree of latitude in the selection of methods and materials, which are of equal application to our own depots and our manufacturers, and which will be considered seriously by all services for adoption.

Our last major policy requires little discussion here, since I find that it practically enunciated itself in consideration of the factors involved. We have initiated action through the Air Force Packaging and Materials Handling Board to make indoctrination and training in materiel preservation and all its phases a requirement in all training and indoctrination curricula within the Air Force. We are planning to establish a series of training courses in strategically located field installations for supervisory as well as for production-line workers. The purpose of these courses is to supplement the basic training now afforded by Rossford Arsenal. Within my own Packaging Division, we have a nucleus of junior officers being trained to qualify as staff officers in this field. We have proposed to Air Force headquarters that courses such as those offered by Wayne University in packaging and materials handling be formally included in the professional university training now available to Air Force officers. It is our purpose to make all levels of Air Force management aware of the importance of our mission and to provide a structure which will assure continuity of planning and implementation not only for this Air Force, but for the one of tomorrow.

A Navy View Of Packaging—Ed Heller, *Chief, Packaging Section, Navy Materiel, United States Navy, Washington, D. C.* Military packaging specifications are strict because defense supplies must stand the rigors of any climate, the knocks of many trans-shipments and the deterioration of years of storage.

It has been stated, said Mr. Heller, that during World War II more material was lost to us through the attack of rust and corrosion than was lost to German submarine attacks in the Atlantic. After World War II there was a tendency to relax military requirements for packaging because of loss of experienced personnel, shortage of funds and the reluctance of some firms to comply with relatively stringent military packaging requirements. In consequence, packaging conforming to "the best commercial practice" became accepted in many military contracts. When military buying increased in 1948 and 1949, more and more equipment reached supply activities in an unsatisfactory state, said Mr. Heller. Material also was received in carload lots that could not be stored more than one layer deep in warehouses. Action was taken to require all procuring activities to include packaging requirements in procurement requisitions. This practice was followed by a uniform basic packaging policy for the entire Navy.

But packaging policy does not always require the most complex and complete form of packaging on every defense item, Mr. Heller emphasized. Under certain conditions, a reduced level of packaging may be specified.

It is essential that industry be kept in the military packaging business, Mr. Heller added, first, to insure that material is delivered in such condition that it can be stored, handled and reshipped with a minimum of effort and, second, to meet any emergency situation.

Changing

MORE CONVENTIONAL round bottle (left) will eventually replace the Calvert Reserve decanter which was introduced in 1934. Overcrowded backbar shelves and butter-fingered bartenders made the change advisable.

When the general contours of a container have become an important element in brand recognition of a product, changes in package design present a special problem.

Some package changes, however, are necessary and inevitable with changes in marketing conditions or advances of packaging art and technology. This is often true even when the product's sales are quite satisfactory.

In the consideration of such a change, two factors call for careful study. First, the existing familiar and well-known package must be analyzed impartially to determine how important the various elements of its design (such as shape, color and typography) really are in brand recognition. Often, when package redesign eliminates one of these elements out of necessity, one or more of the others can be given added emphasis to even up the score. Second, when the new design has been settled on, it may be necessary to promote the virtues of the new package vigorously in order to assure unimpaired transfer of consumers' recognition responses to the new package.

Calvert drops decanter

Two good examples of such changes are currently found in the liquor field, where any package change is most carefully weighed.

A touchy situation was carefully and deftly handled by the Calvert Distillers Corp., New York, when it decided to replace its familiar custom-mold decanter bottle, long used for all Calvert Reserve blended whiskey, with a custom-molded round bottle. The decanters had been on the market for 18 years, except for a wartime "victory bottle" period and, naturally, had been featured in Calvert's extensive advertising. The decanter-bottled brand is the second-largest seller in the country and is the best-selling whiskey in many of its market areas. The company was not anxious to tamper with the package; nevertheless a change had to be made.

Prime reason for the decision to deprive Calvert Reserve of its distinctive decanter was the overcrowded condition of the average backbar shelf, where the brands of a bar's stock are displayed. With increasing competition for this limited space, the decanter bottle had become a liability because its shape encouraged busy bartenders to replace it on the shelf "edgewise," simply because it took up less running shelf space that way. And when the decanter was jammed in edgewise, the Calvert Reserve label was no longer on display.

A secondary reason was the fact that some bartenders had begun to claim that the decanter bottle was harder to pick up and harder to hold on to. Bartenders usually pride themselves on the dexterity of their motions, so this factor could lead an increasing number of bartenders to pick up a bottle of some other brand in preference to Calvert Reserve, except when the customer specified the brand. The idea of a special "barbottle" shape was rejected as confusing to consumers.

Sales across the bar account for a bit less than 30% of Calvert Reserve's market, but bars also serve as an important battleground of the brands. Brand preferences formed there are reflected in sales by the package stores. Thus the two factors of backbar display and ease of handling swung enough weight to dictate a change in Calvert Reserve packaging.

It was concluded that although the decanter shape had definite prestige and recognition value, it was not an essential point of brand recognition. This assumption was tested and found to be true. The potential loss from a switch to a conventional bottle seemed definitely less important than eliminating the shortcomings in bars.

contours

IT'S A STEP NOT TO BE TAKEN LIGHTLY IN THE FACE OF TRADITION, BUT TWO DISTILLERS ARE TAKING IT FOR PRACTICAL REASONS

The importance of shape had a good test in wartime, when all brands used identical "victory bottles." During that period, labels alone had identified the brands and Calvert Reserve had maintained its brand strength. However, this was considered a somewhat artificial situation and the evidence was compared with consumer-recognition tests carried out in principal market areas. These tests reinforced the assumption that brand recognition would lose little from a switch to a round bottle—amber in color like its predessor.

The new bottle shape adopted for Calvert Reserve is the same as that used for Lord Calvert, the company's premium blend. Surface embossing is, however, distinctive and is reminiscent of the old decanter bottle; it also adds to the "sure-grip" feature. The label is a new design which picks up the color, shape and typography of the decanter's die-cut label and accentuates these characteristics. In shape, the new label has the same depth exactly as the old and the same general outlines, making it easy to handle on the same labeling machine. Width is approximately ⅝ in. greater, which presented no labeling difficulty.

The background of this new wider label uses the same yellow as the decanter label, but eliminates the orange shading at the edges so that the new label looks larger. This cleared and wider background sets off the lettering to better advantage and seems less crowded, although the name "Calvert" is enlarged almost 50%.

The word "Reserve" is now set smaller, though in a bolder face. It was desired to reduce emphasis on this term which is, after all, not an exclusive possession of Calvert Distillers. The name "Calvert" and the words "Blended Whiskey" are the only lines printed in red on the new label; the old label also used red for the three lines at the bottom giving the company's full name and locations of its distilleries.

In other respects the new label is similar, retaining the narrow brown edging set off by a narrower strip of gold. There is, however, a more modern treatment of the traditional Calvert medallion with its portrait of Lord Baltimore, which gains prominence in the new label by being set off against the yellow background.

Having designed a new label that would, it was felt, carry the load of brand recognition without help from bottle shape, Calvert Distillers have set in motion a planned program with three main points. These are:

1. Slow "infiltration" of the new bottles into the distribution system, instead of overnight replacement.

2. A system of "control" areas, which receive none of the new bottles, so that comparison of sales figures will indicate effect, if any, of the new bottles.

3. A program of explanation so that the company's salesmen will be equipped to introduce the new bottles properly to distributors, retailers and bartenders.

Calvert salesmen are being provided with special hinged presentation boxes to help them explain the new bottles. One box holds half-pint and pint flasks (in pocket-fitting shape) and a round fifth, another holds a quart and a fifth, and a third style designed primarily to be shown to bartenders holds a single quart. These cartons have drop-down sides, revealing on their inner surfaces a complete sales story stressing the advantages of the new bottles.

Consumer advertising is to follow on similar themes. However, according to Tubie Resnik, Calvert vice president in charge of sales, "Sales will be the only concrete answer to the decanter-vs.-round-bottle controversy. Particularly in areas where the brand is in the No. 1 spot, saleswise, some of our own people think things should not be tampered with. This is an altogether understandable attitude, but progress requires constant experiment, testing and improvement. The first six months or so of the new round bottle will be experimental."

In the meantime, Calvert is going

PRESENTATION BOX used by Calvert salesmen to sell the package to bartenders and retailers claims new bottles are easier to hold, easier to recognize because of clearer label design.

CLUB-SIZE round bottle has been added to the flat pint size for most of Publicker subsidiary brands, like Continental's Philadelphia. Hip-pocket trade in pint sizes was found less important by Publicker Industries than pints bought for home serving.

ahead with plans to extend the decanter-to-round-bottle change-over to include Calvert Gin. The gin bottle has been a flint version of the amber whiskey decanter; it will be gradually withdrawn, starting in September, and replaced with a flint version of the new "sure-grip" bottle. The gin label, previously blue, will be redesigned to approximate closely the new Calvert Reserve yellow label. It is felt that this will give the brand a better Calvert Distillers identification on display and make it a companion package.

In its bottling plants, Calvert Distillers Corp. will realize considerably improved opportunities for efficiency and flexibility of change-over. The new bottles have the same fill height as Lord Calvert and other brands bottled in the same plants. This will speed up change-over, as only label holders will have to be shifted to ready the line.

Kinsey pints go round

Elsewhere in the liquor industry, it was the effect of rising prices on consumers' buying habits that inspired a bottle-shape change. The shift was made after Publicker Industries, Inc., Philadelphia, Pa., discovered that the flat pint bottles marketed by its distilling subsidiaries were being bought more and more for home consumption. As the traditional flat pint bottle had been developed for the hip-pocket trade, Publicker realized that many who were now buying pints to serve in their homes probably weren't entirely happy about this shape. To make them happy, Publicker tried out what it calls a Club Size round pint.

The first test was made in June in the New York market where Publicker subsidiary, Kinsey Distilling Corp., distributed its Kinsey Silver, a blended whiskey, in the new bottles. In appearance, the round pints are a small version of the fifths. The trade was told that more than 75% of pint sales had been found to be for home consumption, bought by customers who once bought fifths. The round pint, it was explained, gave them an "attractive, easy-to-handle" bottle to serve in their homes.

The sales response to the Kinsey round pint package convinced Publicker that its market analysis had been accurate and within a month after the first test distribution the decision was made to start using the Club Size bottles immediately, in addition to flat pints, for two other Kinsey blends and Kinsey Gin, as well as for 15 other brands produced by Publicker subsidiaries Continental Distilling Corp., Old Hickory Distilling Corp. and W. A. Haller Corp. In all, 19 brands have made the switch; the products include blended whiskeys, straight bourbons, straight ryes and gins, as well as bottled-in-bond bourbons and ryes.

CREDITS: *Calvert—Bottle, Thatcher Glass Mfg. Co., Inc., Elmira, N. Y. Label, Gamse Lithographing Co., Inc., 419-421 E. Lombard St., Baltimore 2, Md. Cap and cork stopper, Owens-Illinois Glass Co., Toledo 1, Ohio, and Armstrong Cork Co., Liberty St., Lancaster, Pa. Cellulose bands, The Celon Co., 2034 Pennsylvania Ave., Madison, Wis. Publicker (Philadelphia brand)—Bottle, Owens-Illinois Glass Co. Label, W. Franklin Hodges & Sons, Inc., 509 Vine St., Philadelphia. Cork stopper, Armstrong Cork Co. Neckband, The Celon Co.*

Lydia Pinkham makes bid for younger generation

Another significant example of changing trends is the current redesign of the Lydia E. Pinkham package. It represents the second step toward package modernization on which the company embarked two years ago to win new young customers and to provide a more ethical-looking package in keeping with the company's modern clinical research. It is also aimed for self-service selling in new outlets.

The 65-yr.-old Lydia E. Pinkham Medicine Co., Lynn, Mass., has probably been one of the most conservative packagers, having once been made leary of "radical" changes when one less star in a package design for one of its products made customers question whether the new package was genuine.

Recently the company has become aware that an old-fashioned package may imply an old-fashioned product. A comparison of the early Lydia Pinkham package—used from 1887 to 1925 with practically no change except rewording of copy claims—with the 1950 and 1952 packages shows how skillfully restyling may be done without sacrificing identity.

In 1939 the company replaced its old-time wrap with a carton—much relieved of clutter and with a new etching of Lydia and installed cartoning equipment—a program which won an award in the 1939 MODERN PACKAGING All-America Package Competition.*

This design was given further face-lifting in 1950 and today emerges as an up-to-date package. The "dusty" pink background has been lightened to a more pleasing shade. The drawing of Lydia is simpler and more friendly. Old-fashioned decoration has been replaced by a simple new logotype and border.

SKILLFUL STEPS in design produce an up-to-date package, yet carry over enough of the old to maintain strong recognition for the consumer.

CREDITS: *Cartons, National Folding Box Co., Inc., P. O. Box 1004, New Haven 4, Conn. Bottles, Owens-Illinois Glass Co., Toledo 1, Ohio. Caps, Anchor Hocking Glass Corp., Lancaster, Ohio. Labels, The Bowlby Press, Lynn, Mass.*

* See MODERN PACKAGING, March, 1940, p. 278.

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Moistureproof shipment

HOW GENERAL MILLS FOUND A LOW-COST SOLUTION TO PROBLEM OF TRANSCONTINENTAL BULK SHIPMENT OF DEHYDRATED APPLE SLICES.

By C. E. Felt, F. H. Cook and L. F. Borchardt*

How to make bulk shipments of dehydrated apple slices so their moisture content would not increase more than one-half of one percent during a month of shipment and storage was a problem facing General Mills in 1946. This was complicated by the fact that dehydrated apple slices are extremely hygroscopic and shipment was to be from California to Chicago. An unusually effective protection from water vapor was needed.

Solution of the problem came in four steps:

1. Investigating the packaging possibilities
2. Making a preliminary laboratory study of these possibilities
3. Checking the most likely possibilities under actual shipping conditions
4. Commercial confirmation

To start with, the experience of the Armed Forces with apple slices was available for study. They had shipped the slices in square 5-gal. tins sealed with a friction-type cover. However, the small size of this container meant a great deal of handling. The container was costly and there was a freight problem involved in its re-use.

General Mills looked into the package possibilities which appeared most promising from a cost standpoint. Some of the best appeared to be fibre drums with moisture protection, two weights of metal drums, tank cars, multiwall bags and corrugated containers with moisture protection.

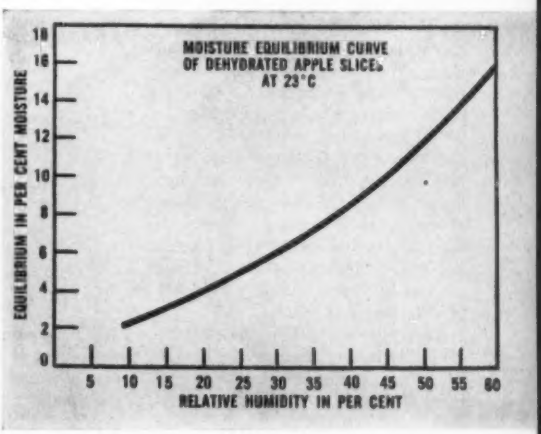
However, there were objections to several of these.

For example, metal drums had the same high cost and re-use problems as the 5-gal. tins formerly used by the Armed Forces. Also, they were not available at the time.

Nested fibre drums were reasonable in cost and could be nested for return shipment. They looked like a promising solution until it developed that they, too, were unavailable.

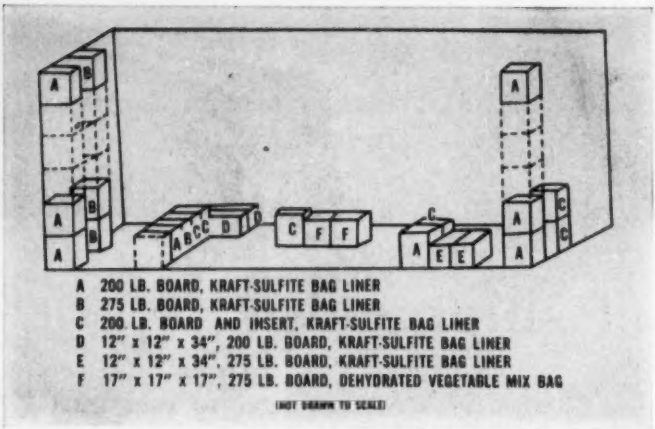
Tank cars presented a storage problem at the plant and presented the further hazard of crushing the apple slices at the bottom of the load.

Multiwall bags were available and cheap, but were not the solution. They gave the apple slices no protection against crushing when the bags were stacked—and it was necessary to stack them both during shipment and during storage at General Mills' Chicago plant. There was also the danger that the bags could be torn



1. DIFFICULTY of problem is shown by curve indicating that apple slices at 2% moisture, as produced, are in equilibrium with an atmosphere of only 10% R.H. Only 0.5% moisture pick-up could be allowed in shipment made from West Coast to Chicago.

* All of the Research Dept., General Mills, Inc., Minneapolis. This article is based on a paper delivered before the Institute of Food Technologists, Grand Rapids, Mich., July, 1952.


A 200 LB. BOARD, KRAFT-SULFITE BAG LINER
B 275 LB. BOARD, KRAFT-SULFITE BAG LINER
C 200 LB. BOARD AND INSERT, KRAFT-SULFITE BAG LINER
D 12" x 12" x 34", 200 LB. BOARD, KRAFT-SULFITE BAG LINER
E 12" x 12" x 34", 275 LB. BOARD, KRAFT-SULFITE BAG LINER
F 17" x 17" x 17", 275 LB. BOARD, DEHYDRATED VEGETABLE MIX BAG
(NOT DRAWN TO SCALE)

2. BOXCAR POSITIONS of cases containing dehydrated slices in test shipment. All of the cases were of corrugated board. Cases A, B and C were "cereal-size" containers measuring 20¼ by 15⅜ by 16⅞ in.

or punctured during shipment. This meant a possible loss of moisture protection and contamination of the slices.

There remained only one possibility —corrugated containers.

Corrugated containers had three obvious advantages. They were cheap, they were available and they could easily be knocked down and shipped back to California in bundles.

Having reached a tentative decision on the type of container to use, it was time to consider the principal problem involved in this study: moisture protection.

Moisture-barrier study

It was necessary to start with an assumption in regard to the moisture problem. This assumption was that the time elapsed between loading the apple slices in California and using them in Chicago—including transportation and storage at the Chicago plant before being repackaged—would not exceed one month. It was also known that the apple slices were produced at 2.0% moisture and had to be put into the consumer packages at not more than 2.5% moisture. It followed, then, that the slices should not gain more than one-half of one percent in weight during one month of shipment and storage.

For experimental purposes, this condition was approximated by shipping the apple slices by express from Minneapolis to Chicago and return, plus four weeks' storage in the weather room. This weather room is a storage facility in the General Mills Research Laboratory which produces a temperature and humidity cycle averaging 65% relative humidity and 82.5 deg. F. temperature.

The search was started for a water-vapor barrier—a bag material which could be used in corrugated containers to protect the apple slices from picking up more than the allowable amount of moisture.

Fig. 1 shows the moisture-equilibrium curve of apple slices and gives some idea of the difficulty of this problem. Note that apple slices at 2% moisture are in equilibrium with an atmosphere of only 10% relative humidity.

The necessary minimum water-vapor permeability for the barrier material was determined from the following formula:

$$P = \frac{0.005W}{AT}$$

where P = minimum water-vapor permeability
W = total weight of slices originally in the container
0.005 = permitted weight gain per unit weight of slices
A = area of the barrier (surface area of container)
T = time in months

This value expressed in metric units turned out to be 1.60 g./sq. meter/24 hrs. at weather-room conditions. At the conditions under which the cabinet in which we determine water-vapor-permeability values operates, namely 72 deg. F. and 65% R.H., this value becomes 1.13 g./sq. meter/24 hrs. Papers having flat permeabilities above this value were eliminated without further experimental work.

The water-vapor-permeability results of some of the barriers considered are shown in Table I. Most of the flat permeability results shown are better than the set limit of 1.13 g./sq. meter/24 hrs. The barrier used in the shipment of dried vegetable mix is included in this list because it was used later to show that the permeability standards had not been set too high.

TABLE I—WATER-VAPOR PERMEABILITY RESULTS OF SOME POSSIBLE BAG MATERIALS FOR BULK APPLE SLICES

No.	*Descripton*	*Water-vapor permeability results in g./m²/24 hrs. at 72°F. and 65% R.H.*	
		Flat	*Fold*
1	Kraft laminated to foil, heat-sealing lacquer coated on foil side. Total ream weight 49 lbs.	0.15	0.10
2	Kraft laminated to sulfite, heat-sealing lacquer coated on sulfite side. Total ream weight 81 lbs.	0.61	1.7
3	Laminated cellophane, MSAT, 600	0.53	0.84
4	Kraft laminated to highly calendered sulfite, heat-sealing lacquer coated on sulfite side. Total ream weight 71 lbs.	2.0	4.7
5	Paper wax laminated to foil wax laminated to tissue. Total ream weight 80 lbs.	0.042	1.0
6	Waxed paper from a bag used for dehydrated vegetable mixes. Total ream weight 51 lbs.	3.0	6.8

Several packaging materials which showed promise were selected for storage tests in the weather room. Apple slices were packed in liner bags inside containers and shipped by Railway Express to Chicago and back. This was done to avoid unusually good results because of lack of handling. Table II shows the results from a representative storage test in the weather room.

The liner bags used in this test were shaped over a mandrel, inserted

TABLE II—DATA OBTAINED ON APPLE SLICES BAGS IN A WEATHER-ROOM STORAGE TEST

No.	Description	Moisture gain in % after 4 wks. W. R. storage (65% R.H., Avg. 82.5°F.)	Flat water-vapor permeability (65% R.H., 72°F.) in g./m²/24 hrs.
1	Kraft laminated to foil, heat-sealing lacquer coated on foil side. Total ream wt. 49 lbs.	0.7	0.15
2	Kraft laminated to sulfite, heat-sealing lacquer coated on sulfite side. Total ream wt. 81 lbs.	0.3	0.61
3	Laminated cellophane, MSAT, 600	0.3	0.53
4	Kraft laminated to highly calendered sulfite, heat-sealing lacquer coated on sulfite side. Total ream wt. 71 lbs.	0.7	2.0
5	Paper wax laminated to foil wax laminated to tissue. Total ream wt. 80 lbs.	0.5	0.042

into corrugated shipping containers of 200-lb.-test board, filled with 25 lbs. of apple slices and closed by heat sealing. The containers measured 20¾ by 15¾ by 16¾ in. and are normally used to ship 36 packages of 8-oz. cereals. They will be referred to throughout this paper as cereal-size cases. The filled containers underwent the usual express shipment before storage.

The two best performers were the kraft laminated to sulfite (No. 2) and the laminated cellophane bags (No. 3). Flat permeability results are included for comparison. They show that the kraft-to-calendered-sulfite lamination (No. 4), which has substandard permeability values, did not perform well. However, the kraft-to-foil combination (No. 1), which was within the permeability limit, also failed to perform well. A discrepancy such as this can be due to failure to seal properly, to bad fracturing during bag fabrication, or to crumpling or wrinkling of the bag material during shipping or storage. Obviously, it was necessary to check performance by actual use.

By this time it could be seen that suitable moisture-barrier materials were available.

Container strength and closure

While working on the moisture-barrier problem, General Mills was able to study container strength at the same time.

Inspections of the cases of 200-lb.-test board which were used in these tests revealed that frequently they returned from shipment battered and not re-usable. An additional shipment of cereal-size cases, some of which had perimeter inserts, was made to Chicago. When they returned, cases constructed of 200-lb.-test board with no inserts showed severe damage; the board structures were broken and a corner of one taped seam was split. These cases were probably not re-usable. All the cases constructed of 200-lb.-test board having a 200-lb.-test-board perimeter insert returned in re-usable condition.

In addition to the Railway Express shipments, containers were tested in compression-testing equipment. These tests confirmed the information obtained in the shipping test, that 200-lb. test containers were appreciably weaker than the same containers containing inserts. But handling of inserts was time-consuming and the additional strength in stacking was obtained only when the container was in an upright position. These results and considerations indicated the need for a container without inserts made of a test board stronger than 200 lbs.

After several trials with adhesives and with kraft tapes, it was tentatively decided that tape was the best method of closing the container flaps. It greatly facilitated knocking down the containers for the return shipment.

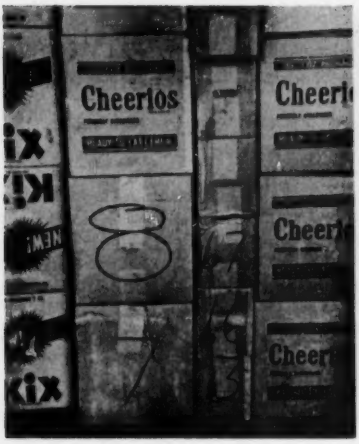
From the tests conducted to this point, it was possible to establish fairly well the weight of board to be used, the tape method of closing the container and the type of moisture protection needed. The time had arrived to see if these findings would be confirmed by simulated conditions of use.

Shipping tests

For this reason, a shipping test between Buffalo, N. Y., and Los Angeles, Calif., was inaugurated. It included as variables the types of liners under consideration, the sizes of containers, the weights of container board and the loading positions throughout the boxcar. Buffalo was chosen for the origin of the shipment because the materials could be included in a carload of company material shipped from the Buffalo plant.

The 24 cases for this bulk shipment of apple slices were assembled at Minneapolis at General Mills Research Laboratories and were shipped to Buffalo by truck. At Buffalo they were loaded into a 50-ft. boxcar in predetermined positions. The remainder of the boxcar was filled with other cased products. The positions used

3. ROUTE of test boxcar shipment from Buffalo to Los Angeles, which was preceded by shipment of the cases from Minneapolis to Buffalo. Total elapsed time from sealing to opening of the cases was more than a month.



4. ARRIVAL PHOTO at Los Angeles. Cases marked 7 and 8 (275-lb.-test board) were in good, re-usable condition though they were at bottom of stack in boxcar.

5. COMPARISON of condition on arrival of cereal-size cases of 200-lb. board (No. 15), 275-lb. board (No. 16) and 200-lb. board with perimeter insert (No. 17). These three were at the bottom of the adjacent stacks. Case No. 15 shows decided amount of damage; other two were re-usable.

were designed to sample as many as possible of the loading conditions in the boxcar. Since this car contained quite a number of different-sized cases, loads were not always borne as they would have been in a car loaded with uniform cases.

The positions of cases containing the dehydrated apple slices are shown in Fig. 2. The letter A indicates a cereal-size case of 200-lb.-test board. The letter B indicates the same size case made of 275-lb.-test board. The letter C again indicates the same size case, this time of 200-lb.-test board but fitted with a perimeter insert of 200-lb.-test board. Letters A, B and C fitted with disposable bags of kraft laminated to sulfite. Bags made of this material were shown to be adequate water-vapor barriers in the Chicago express shipment and storage test, the results of which are shown in Table I.

Letters D and E indicate cases of the dimensions 12 by 12 by 34 in. They were not considered to be so practical in size as the cereal case and were included in the test only because of a possibility that foil-laminated inner liner bags would be used. (At that time commercial bags made of foil laminations were limited to the size used in this container by the maximum width of foil rolled.) Letter D indicates that the case was made of 200-lb.-test board; Letter E, that it was made of 275-lb.-test board. The bag used in each case was again made of kraft laminated to sulfite; the foil-laminated bag was not used.

Letter F indicates a 17-in. cube of 275-lb.-test board with a waxed paper bag as a water-vapor barrier; this combination was normally used in shipping a dried vegetable mix. The size of this container was determined by convenience; the container and the bag to fit it were readily available. It was desired to include this particular bag because it was already in commercial use and because, with its poor flat permeability value of 3.0, it would show whether the moisture protection standards had been set too high.

Each container except the two Letter F's contained 25 lbs. of dehydrated apple slices. The Letter F's contained 22½ lbs. Two strips of 60-lb. kraft tape were used to close each of these containers.

The loaded car was en route from Buffalo to Los Angeles between July 18 and July 27 or 28. Fig. 3 shows the route taken. Since the containers were loaded in Minneapolis during the last week of June, shipped to Buffalo July 3, shipped across the country to Los Angeles and opened July 28, they were exposed to a month of what were, from the standpoint of this packaging operation, severe weather conditions. It was felt, therefore, that if these containers and bags provided adequate protection under the conditions of this shipment, they would be satisfactory for use in the bulk-shipment operation. The unloading of the car took place in Los Angeles and the damage to each container was ascertained by inspection. The condition of some of the containers is illustrated in Figs. 4 and 5.

The containers marked 7 and 8 in Fig. 4 are the two bottom containers in a stack at one end of the car. They were made from 275-lb.-test board. Both were in good, re-usable condition.

Cases numbered 15, 16 and 17 in Fig. 5 were cereal-size cases at the bottom of the load approximately over the wheels of the car. Case No. 15 illustrates how badly damaged a case made of 200-lb. board can become at the bottom of a load. In contrast, Case No. 16 of 275-lb. board and Case No. 17 of the 200-lb. board with a perimeter insert, both of which were under the same load as Case No. 15, were relatively undamaged.

These pictured results were quite representative. Cases of 200-lb. board of this size without inserts which were placed in the bottom two tiers of the load were in poor condition. All containers of this size made from 275-lb. board were re-usable. All except one of the containers of the 200-lb.-board group with perimeter inserts were considered re-usable.

Cases 12 by 12 by 34 in. were not

(This article continued on page 202)

Test methods for plastics

PACKAGING INSTITUTE PROPOSES FIVE PROCEDURES, ALL ADAPTED FROM THE AMERICAN SOCIETY FOR TESTING MATERIALS

The test methods presented below have been proposed by the Films and Foils Committee of the Packaging Institute for the conditioning and accelerated-age testing of plastics and plastic films.

Both of the tests have been adapted from methods of the American Society for Testing Materials. Although they refer to molded plastic objects, they are, according to Lew Hayhurst, chairman of the Films and Foils Committee of PI, equally applicable to plastic films. Attention is called to the fact that they have only "proposed" status; according to the regular procedure of the Packaging Institute they will be revised after approximately a year's use and re-issued as "tentative" procedures. Meanwhile, criticisms are invited.

Also recently issued are three additional proposed test methods adapted from ASTM: Testing Folding Endurance of Films and Foils (PI Films & Foils 2p-51), Testing Internal Tearing Resistance of Films and Foils (PI Films & Foils 3p-51) and Testing Blocking of Plastic Films and Sheets (PI Films & Foils 5p-51).

Printed copies of all of these methods are distributed to members of the Institute and are available to non-members, at 25 cents each, from the Packaging Institute, 342 Madison Ave., New York 17.

Testing accelerated aging of plastics (PI Films & Foils 4p-51*)

Purpose

1. (a) These methods of test cover procedures for determining the weight and shape changes occurring in plastics under various conditions of use, not where exposure to direct sunlight, weathering, corrosive atmospheres or heat alone is involved, but where changes in atmospheric temperature and humidity are encountered. This embraces the interior of buildings and the interior of transport facilities such as motor vehicles, airplane cargo spaces or wing interiors, holds of ships and railroad cars. Procedures are provided for exposing plastics to combinations of extreme humidity and temperature that will accelerate the changes taking place in the materials kept in sheltered spaces, but subject to humidity and temperature variations.[1]

(b) Seven test procedures are provided which prescribe conditions for different types of exposure. Six of the procedures cover exposures at graduated levels of temperature and extremes of humidity; the seventh prescribes conditions involving alternate exposure to high and low temperatures. Insofar as weight and shape changes embraced under the general term of dimensional stability are concerned, these procedures provide a method of test. Further use of any of the conditions set up in the procedures is suggested, such as conditioning schedules prior to physical testing of the plastic either to test it at the particular condition involved, or to study changes resulting from exposure to that condition.

Significance of tests

2. (a) The test conditions covered in these methods represent a start towards organizing a group of test procedures for determining the effects of specified changes of atmospheric temperature and humidity upon plastic articles. These procedures have been used for testing both thermosetting and thermoplastic materials.[2]

(b) While several of the testing temperatures are not used in other ASTM or PI methods, they have a background of several years experience in portions of the plastics industry. Especially in Procedures IV and V (Sections 11 and 12) the accelerating effect of temperature in prompting changes caused by a rise in humidity leads to temperatures that are well above those encountered in normal service and they are used simply to accelerate change.

(c) Procedure I (Section 8) has been found to develop warping, weight change and exudation in plastic parts. Procedure II (Section 9) is designed to reveal poorly cured plastics by developing cracks in them. Procedures III and IV are more severe measures of the same tendencies developed in Procedure I; the conditions of Procedure IV will produce noticeable chemical decomposition in many plastics. Procedure V (Section 12) is especially valuable in testing the be-

* Proposed method adapted from ASTM D 756-50, "Standard Methods of Test for Resistance of Plastics to Accelerated Service Conditions."

[1] To simulate the behavior of plastics subject to repeated exposure to heat and humidity, test procedures involving the use of repeated cycles of dry heat and humid heat may be selected from the single-cycle test procedures described in these methods. In making such cycle tests, the initial conditioning shall be given, followed by exposure to the test as stated. Subsequent test procedures shall be applied without reconditioning the specimen at the end of each unit of the cycle. For instance, in carrying out a three-cycle exposure to Procedure I, the first cycle shall be carried out in accordance with Sections 8 (a) to (h), the second cycle in accordance with Sections 8 (c) to (h) and the third cycle in accordance with Sections 8 (c) to (j). The reconditioning shall always be carried out at the end of the test cycle unless sample failure makes this step appear trivial. In reporting such tests, mention should be made of the various stages selected for the cycle and the number of cycles to which the specimen is subjected.

[2] These test procedures covered in these methods have been drawn from various tests used in branches of the plastic industry and by Government agencies in procurement of materials.

havior of plastic parts with metallic inserts and laminates for cracking on exposure to temperature change. Procedures VI and VII are modifications of Procedure I, applying to impact-resistant and low heat-distortion temperature types of thermoplastics, respectively.

Apparatus

3. The apparatus shall consist of the following:

(a) *Balance*—A balance capable of weighing accurately to 0.05% a test specimen weighing 100 g. or less and to 0.1% a test specimen weighing over 100 g.

(b) *Oven*—A circulation air oven capable of maintaining the required temperature of test within plus or minus 2 deg. F.

(c) *Containers*—Noncorroding containers with a shelf to support the test specimen above the solution used for maintaining the required humidity. The container shall be tightly sealed except for a small capillary which permits release of vapor pressure that might otherwise lift the top off the container. Each test specimen shall be tested preferably in a separate container.

(d) *Desiccator*—A clean, dry, uncharged desiccator or equivalent closed container in which to bring test specimens to room temperature.

(e) *Absorbent cloth*—Clean, nonlinting absorbent cloth for use in wiping exudation or condensed moisture from test specimens.

(f) *Micrometer*—A micrometer capable of measuring dimensions of test specimens to 0.001 in.

(g) *Cold box*—A cold box capable of maintaining the required temperature of test within plus or minus 5 deg. F.

Test specimens

4. The general term plastics is used to describe the samples tested, since it is the intent of these methods to provide testing procedures which apply with equal validity to finished articles comprising plastics components together with other materials, to plastics parts, to plastics articles, to test specimens molded from plastics and, if shape and nature of the material permit, to sheets, rods, tubes or other plastic shapes furnished in a finally processed form. The shape, size and process of forming greatly influence the behavior of plastic objects, hence a standard-size test specimen is not prescribed in these methods, but the type of test specimen to be used shall be specified by the purchaser. Each test shall be made in duplicate.

Conditioning

5. Unless otherwise specified, test specimens shall be conditioned prior to testing and reconditioned at the end of the test procedure in accordance with the Standard Procedure of the Tentative Methods of Conditioning Plastics and Electrical Insulating Materials for Testing (ASTM Designation: D 618 or by PI Films and Foils 1p-51) test specimens of material ¼ in. or less in thickness of plastic section shall be conditioned for a minimum period of 40 hrs. and specimens of material over ¼ in. in thickness of plastic section shall be conditioned for a period of at least 88 hrs.

Measurements of test specimens

6. (a) The following measurements shall be made on conditioned test specimens prior to testing, after reconditioning at the end of a test procedure and at any intermediate stage as prescribed in the test procedures:

(1) *Weight*—The weight within 0.05% if the specimen weighs 100 g. or less and within 0.1% if the specimen exceeds 100 g. in weight.

(2) *Dimensions*—The thickness to 0.001 in., the plane dimension in the direction of injection or transfer to 0.001 in. and the plane dimension across the direction of injection or transfer to 0.001 in.

(3) *Dimensions of compression-molded specimen*—The thickness to 0.001 in. and the perpendicular dimensions in the plane at right angles to the direction of molding to 0.001 in.

(b) Specimens shall be brought to room temperature in the uncharged desiccator, which will require 10 to 30 min. Then the specimen shall be weighed in less than 10 min. after exposure to room conditions. The dimensions shall be measured immediately after weighing the specimen.

(c) At the discretion of the purchaser, requirements for weights and measurements at intermediate stages given in the procedures may be omitted.

Visual examination

7. Noticeable qualitative changes in surface, dimensions and general appearance of the test specimen shall be recorded after each stage of the testing procedure. These changes include items such as: color, surface irregularities, odor, tears and splits. Changes shall also be noted as they occur.

Procedure I

8. (a) The test cycle for Procedure I shall be as follows: 24 hrs. at 140 deg. F. and 88% relative humidity, followed by 24 hrs. at 140 deg. F. in the oven.

(b) Condition the specimen, weigh and measure dimensions in accordance with Sections 5 and 6.

(c) Expose the specimen for 24 hrs. on the shelf of a container maintained at 140 ±2 deg. F. in the oven and containing a saturated solution of sodium sulfate to maintain a relative humidity of 85 to 89%.

(d) Remove the specimen from the container, place it in the uncharged desiccator and bring to room temperature in accordance with Section 6 (b).

(e) Wipe the specimen with the absorbent cloth, then weigh, measure dimensions and examine visually in accordance with Sections 6 and 7.

(f) Within 2 hrs. after completion of the operation prescribed in paragraph (c), expose the specimen for 24 hrs. in the oven at 140 ±2 deg. F.

(g) Place the specimen in the uncharged desiccator and bring to room temperature in accordance with Section 6 (b).

(h) Weigh the specimen, measure dimensions and examine visually in accordance with Sections 6 and 7.

(i) Recondition the specimen, weigh and measure dimensions in accordance with Sections 5 and 6.

(j) The specimen may be subjected to physical tests in accordance with Section 15.

Procedure II

9. (a) The test cycle for Procedure II shall be as follows: 72 hrs. at 140 deg. F. in the oven.

(b) Weigh and measure dimensions of the specimen in the as-received condition in accordance with Section 6.

(c) Expose the specimen for 72 hrs. in the oven at 140 ±2 deg. F.

(d) Place the specimen in the uncharged desiccator and bring to room temperature in accordance with Section (b).

(e) Weigh the specimen, measure

dimensions and examine visually in accordance with Sections 6 and 7.

Procedure III

10. (a) The test cycle for Procedure III shall be as follows: 24 hrs. at 160 deg. F. and 70 to 75% relative humidity, followed by 24 hrs. at 160 deg. F. in the oven.

(b) Condition the specimen, weigh and measure its dimensions in accordance with Sections 5 and 6.

(c) Expose the specimen for 24 hrs. on the shelf of a container maintained at 160 ±2 deg. F. in the oven and containing a saturated solution of sodium chloride to maintain a relative humidity of 70 to 75%.

(d) Remove the specimen from the container, place it in the uncharged desiccator and bring to room temperature in accordance with Section 6 (b).

(e) Wipe the specimen with the absorbent cloth, then weigh, measure dimensions and examine visually in accordance with Sections 6 and 7.

(f) Within 2 hrs. after the completion of the operation described in Paragraph (c), expose the specimen for 24 hrs. in the oven at 160 ±2 deg. F.

(g) Place the specimen in the uncharged desiccator and bring to room temperature in accordance with Section 6 (b).

(h) Weigh the specimen, measure dimensions and examine visually in accordance with Sections 6 and 7.

(i) Recondition the specimen, weigh and measure dimensions in accordance with Sections 5 and 6.

(j) The specimen may be subjected to physical tests in accordance with Section 15.

Procedure IV

11. (a) The test cycle for Procedure IV shall be as follows: 24 hrs. at 175 deg. F. over water, followed by 24 hrs. at 175 deg. F. in the oven.

(b) Condition the specimen, weigh and measure dimensions in accordance with Sections 5 and 6.

(c) Expose the specimen for 24 hrs. on the shelf of a container maintained at 175 ±2 deg. F. in the oven and containing distilled water to maintain a humid atmosphere.

(d) Remove the specimen from the container, place it in the uncharged desiccator and bring to room temperature in accordance with Section 6 (b).

(e) Wipe the specimen with the absorbent cloth, then weigh, measure dimensions and examine visually in accordance with Sections 6 and 7.

(f) Within 2 hrs. after the completion of the operation described in Paragraph (c), expose the specimen for 24 hrs. in the oven at 175 ±2 deg. F.

(g) Place the specimen in the uncharged desiccator and bring to room temperature in accordance with Section 6 (b).

(h) Weigh the specimen, measure dimensions and examine visually in accordance with Sections 6 and 7.

(i) Recondition the specimen, weigh and measure dimensions in accordance with Sections 5 and 6.

(j) The specimen may be subjected to physical tests in accordance with Section 15.

Procedure V

12. (a) The test cycle for Procedure V shall be as follows: 24 hrs. at 175 deg. F. and 70 to 75% relative humidity, followed by 24 hrs. at minus 40 deg. F. or minus 70 deg. F., as specified, 24 hrs. at 175 deg. F. in the oven, 24 hrs. at minus 40 deg. F. or minus 70 deg. F., as specified.

(b) Condition the specimen, weigh and measure its dimensions in accordance with Sections 5 and 6.

(c) Expose the specimen for 24 hrs. on the shelf of a container maintained at 175 ±2 deg. F. in the oven and containing a saturated solution of sodium chloride.

(d) Remove the specimen from the container and wipe excess moisture from it with the absorbent cloth.

(e) Within 30 min. after the completion of the operation described in Paragraph (c), expose the specimen for 24 hrs. in a cold box maintained at minus 40 ±4 deg. F. or minus 70 ±4 deg. F., as specified.

(f) Place the specimen in the uncharged desiccator and bring to room temperature in accordance with Section 6 (b).

(g) Wipe the specimen with the absorbent cloth, then weigh, measure dimensions and examine visually in accordance with Sections 6 and 7.

(h) Within 2 hrs. of the completion of the operation described in Paragraph (e), expose the specimen for 24 hrs. in the oven at 175 ±2 deg. F.

(i) Place the specimen in the uncharged desiccator and bring to room temperature in accordance with Section 6 (b).

(j) Within 30 min. after the completion of the operation described in Paragraph (h), expose the specimen for 24 hrs. in the cold box at minus 40 ±4 deg. F. or minus 70 ±4 deg. F., as specified.

(k) Place the specimen in the uncharged desiccator and bring to room temperature in accordance with Section 6 (b).

(l) Wipe the specimen with the absorbent cloth, then weigh, measure dimensions and examine visually in accordance with Sections 6 and 7.

(m) Recondition the specimen, weigh and measure dimensions in accordance with Sections 5 and 6.

(n) The specimen may be subjected to physical tests in accordance with Section 15.

Procedure VI

13. (a) The test cycle for Procedure VI shall be as follows: 24 hrs. at 100 deg. F. and 100% relative humidity, followed by 24 hrs. at 140 deg. F. in an oven.

(b) Condition the specimen, weigh and measure dimensions in accordance with Sections 5 and 6.

(c) Expose the specimen for 24 hrs. in a container maintained at 100 ±2 deg. F. and 100% relative humidity (obtained by using distilled water as the humidifying medium).

(d) Place the specimen in the uncharged desiccator and bring to room temperature in accordance with Section 6 (b).

(e) Wipe the specimen with the absorbent cloth, then weigh and measure dimensions, and examine visually in accordance with Sections 6 and 7.

(f) Within 2 hrs. after the completion of the operations described in Paragraphs (c) and (d), expose the specimen for 24 hrs. in the circulation-air oven at 140 deg. F.

(g) Place the specimen in the uncharged desiccator and bring to room temperature in accordance with Section 6 (b).

(h) Weigh the specimen, measure dimensions and examine visually in accordance with Sections 6 and 7.

(i) Recondition the specimen, weigh and measure dimensions in accordance with Sections 5 and 6.

(j) The specimen may be subjected to physical tests in accordance with Section 15.

Procedure VII

14. (a) The test cycle for Procedure VII shall be as follows: 24 hrs. at 120 deg. F. and 100% relative humidity,

followed by 24 hrs. at 120 deg. F. in an oven.

(b) Condition the specimen, weigh and measure dimensions in accordance with Sections 5 and 6.

(c) Expose the specimen for 24 hrs. in a container maintained at 120 ±2 deg. F. and 100% relative humidity (obtained by using distilled water as the humidifying medium).

(d) Place the specimen in the uncharged desiccator and bring to room temperature in accordance with Section 6 (b).

(e) Wipe the specimen with the absorbent cloth, then weigh and measure dimensions, and examine the specimen visually in accordance with Sections 6 and 7.

(f) Within 2 hrs. after the completion of the operations described in Paragraphs (c) and (d), expose the specimen for 24 hrs. in the circulation-air oven at 120 deg. F.

(g) Place the specimen in the uncharged desiccator and bring to room temperature in accordance with Section 6 (b).

(h) Weigh the specimen, measure dimensions and examine the specimen visually in accordance with Sections 6 and 7.

(i) Recondition the specimen, weigh and measure dimensions in accordance with Sections 5 and 6.

(j) The specimen may be subjected to physical tests in accordance with Section 15.

Physical tests

15. On appropriate test specimens, provided that prohibitive changes in dimension, structure or shape have not taken place, physical tests, such as impact resistance and flexural strength, may be conducted either at one of the test conditions or after the final conditioning for comparison with similar tests on specimens which have not been exposed to the conditions prescribed by these methods.

Report

16. The report shall include:

(1) Description of test specimens, including material, shape, method of molding and where obtained,

(2) Test procedures used, designated by Roman numerals and the number of cycles of each,

(3) Average values of percentage changes in weight and dimensions found after (a) each stage of the testing procedure and (b) reconditioning, when the entire cycle is finished. Notation shall be made whether all measurements prescribed in Section 6 (a) were taken, or whether the simplified procedure of Section 6 (c) was used and

(4) Description of any qualitative changes in appearance that may have taken place during each stage of the test procedure.

Conditioning plastics for testing

(PI Films & Foils 1p-51†)

Purpose

1. In general, the physical properties of plastics are influenced by temperature and relative humidity in a manner that materially affects test results. In order that reliable comparisons may be made of different materials and between different laboratories, it is necessary to standardize the temperature, as well as humidity conditions, to which test specimens of these materials are subjected prior to and during testing. These methods define procedures for conditioning plastics (although not necessarily to equilibrium) prior to testing and the conditions under which they shall be tested.

Definitions

2. (a) *Standard laboratory atmosphere*—An atmosphere having a relative humidity of 50 ±2% at a temperature of 23 ±1.1 deg. C. (73.4 ±2 deg. F.).

(b) *Standard room temperature*—In an atmosphere of unspecified relative humidity, a temperature in the range of 20 to 30 deg. C. (68 to 86 deg. F.) shall be the standard room temperature.

(c) *Standard test temperatures*—When the effect of temperature on a property is to be determined or reported, the test temperatures, unless otherwise specified, shall be chosen from the Table of Temperatures listed below.

Conditioning prior to test

3. (a) *Procedure A*—Test specimens 0.25 in. or under in thickness shall be conditioned in the Standard Laboratory Atmosphere (with adequate air circulation) for a minimum of 40 hrs. immediately prior to testing. Test specimens over 0.25 in. in thickness shall be treated as above except that the minimum time for conditioning shall be 88 hrs.[2]

(b) *Procedure B*—Test specimens shall be conditioned for a period of 48 hrs. in a circulating-air oven at a temperature of 50 ±3 deg. C. (122 ±5.4 deg. F.).

The test specimens shall be removed from the oven and cooled to the Standard Room Temperature in a desiccator over anhydrous calcium chloride (or other suitable desiccant) for a period of at least 5 hrs. for specimens 0.25 in. or under in thickness and at least 15 hrs. for specimens

(This article continued on page 211)

[2] Procedure A is generally satisfactory and is recommended unless other methods are specified.

TABLE OF TEMPERATURES

−70 deg. C. (−94 deg. F.)	2.0 deg. C. (3.6 deg. F.)
−55 deg. C. (−67 deg. F.)	2.0 deg. C. (3.6 deg. F.)
−40 deg. C. (−40 deg. F.)	2.0 deg. C. (3.6 deg. F.)
−25 deg. C. (−13 deg. F.)	2.0 deg. C. (3.6 deg. F.)
0 deg. C. (32 deg. F.)	1.0 deg. C. (1.8 deg. F.)
23 deg. C. (73.4 deg. F.)	1.0 deg. C. (1.8 deg. F.)
50 deg. C. (122 deg. F.)	1.0 deg. C. (1.8 deg. F.)
70 deg. C. (158 deg. F.)	1.0 deg. C. (1.8 deg. F.)
90 deg. C. (194 deg. F.)	1.0 deg. C. (1.8 deg. F.)
105 deg. C. (221 deg. F.)	1.0 deg. C. (1.8 deg. F.)
130 deg. C. (266 deg. F.)	1.0 deg. C. (1.8 deg. F.)
180 deg. C. (356 deg. F.)	1.0 deg. C. (1.8 deg. F.)

† Proposed method adapted from ASTM D 618-51T, "Tentative Methods of Conditioning Plastics and Electrical Insulating Materials for Testing."

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Printed cellophane Shirt Bags give protection plus sparkling display.

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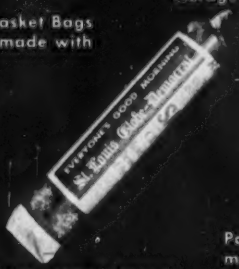
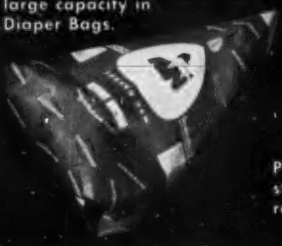
Strong transparent polyethylene is ideal for display of hardware parts.



Wet-strength bags deliver crisp newspapers despite weather.

Polyethylene liner permits re-use of drum without cleaning.

Wide gusset provides extra large capacity in Diaper Bags.



Three-ply, printed Ham Bags speed wrapping and make neater packages.

Pliofilm bags combine visibility, strength and moisture-resistance.

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Overcoming duplex bag breakage

QUESTION: We are experiencing excessive breakage in a duplex bag which we are using for one of our institutional products. The bag consists of a layer of polyethylene with a sheet of kraft on the outside. Several of these bags are put in a shipping case and the breakage always occurs in the kraft sheet. Can you advise us on how we can overcome this problem?

ANSWER: The breakage of the kraft ply in your duplex bag is a result of dropping and rough handling of the case, which throws the product load on to the kraft and causes failure in areas where the bag is not supported by the case. This is caused by the fact that you have two different types of material in your bag construction. The polyethylene ply has a large amount of stretch, whereas the kraft sheet has very low stretch. As a result, when the bag is dropped, the polyethylene stretches and throws the entire load on the kraft and breakage results.

You might solve your difficulty by using another layer of kraft or by using an inner layer of polyethylene-coated kraft in place of the regular film. In either case, the question is entirely one of adding strength to the paper ply. You might also receive some benefit from the use of partitions or nests in your shipping cases.

Bottling viscous liquids

QUESTION: One of our products is an extremely viscous liquid and we are interested in packaging it in a bottle with a very narrow neck. Our regular bottle-filling equipment will not handle this product. Can you suggest a type of filling machine to meet our requirements?

ANSWER: The proper selection of filling equipment must be based on knowledge of a great many factors The most important factors are viscosity, foaming tendencies, size of bottle opening, speed requirements and weight or volume tolerances. The combination of a thick, viscous product and a narrow-mouth bottle makes it difficult to run the filler at high speeds or at a speed which would be easy to attain with wide-mouth jars and with free-flowing liquids.

In recent years there have been new machines developed based on vacuum principles which are capable of handling viscous products with good speeds. It is suggested that you get in touch with several manufacturers of bottling equipment and have their engineers come to your plant to get a complete understanding of your problems. Unquestionably some type of equipment is available which, with some modifications or changes in your bottle, can be made to handle your product.

Flexible wet-strength paper

QUESTION: We have been trying various kinds of resin-treated wet-strength papers in connection with the packaging of one of our products. We find that they need to be more flexible for our machine operation, but when we plasticize them we notice that there is a considerable loss of wet strength. Is there any combination of materials which will not cause this loss of wet strength?

ANSWER: Many types of wet-strength papers develop their properties by means of resins which have been precipitated on the fibres in such a way as to make a water-insoluble bond at the fibre crossings. As you have noticed, this kind of treatment makes the paper less flexible than are the non-wet-strength papers.

When such wet-strength papers are plasticized, the action of the plasticizer tends to lubricate the fibres and reduce the strength of the resin bond. If plasticizing is carried too far, the paper will eventually lose its wet-strength properties.

Perhaps the best answer to your problem is to plasticize the paper with a small amount of moisture from a damp roll as the paper is fed into the machine. This will give your machine working properties without affecting the wet strength of your paper. You should also try various types of paper structures with different wet-strength treatments to determine if some of them have enough original flexibility for your machine operation.

Testing moistureproof labels

QUESTION: We have been experimenting with the use of moistureproof labels on fibre cans of our own manufacture. However, our tests have shown a great variation in the moisture protection of different samples when they are tested with hygroscopic products.

Can you suggest what is causing such variations?

ANSWER: Since you are manufacturing your own fibre cans, it is possible you are filling these cans and putting them under test immediately after they are made. If this is true, then the moisture from the body paste will go into the product since it is being trapped by the moistureproof label on the outside. This use of fresh packages would give a variable effect, since the amount of moisture would depend upon the time between manufacture and filling, and also upon the varying amounts of moisture in the body constructions. It would be advisable to age these packages from 48 hrs. to several days in a warm atmosphere to allow the body moisture to escape before the packages are put under test. It is also possible that your test atmospheres are not accurately controlled as to temperature and humidity, and this could also give varying results in the moisture pick-up.

CEL-O-SEAL

REG. U. S. PAT. OFF

does 3-way selling job

at point of sale

1. CATCHES THE EYE
2. SAYS "PROTECTED QUALITY"
3. HOLDS RECIPE BOOK

Right at the point of sale where more than 66% of all food sales are decided . . . a Du Pont "Cel-O-Seal" band can do a triple-action selling job for you (as illustrated here). First, it calls attention to your package, giving sharp display to your brand name, emblem or sales message. Second, it reminds the shopper that quality is protected and *sealed in*. Third, it holds promotional material at the closure where it makes a bid for repeat sales when the package is opened.

USE THIS FREE SERVICE—Find out how "Cel-O-Seal" adds the extra sales appeal to help your product *sell itself*. Here's the easy way: Send us a labeled dummy of your package. We'll band it, make recommendations, return it for your consideration. No obligation, of course.

"Cel-O-Seal" protects against leakage, keeps closures tight.

"Cel-O-Seal" protects against contamination, assures product purity.

"Cel-O-Seal" protects against tampering, creates customer confidence.

Address:

"Cel-O-Seal" Division, E. I. du Pont de Nemours & Co. (Inc.), 9529-K Nemours Bldg., Wilmington 98, Delaware. "Cel-O-Seal" cellulose bands are also sold by Armstrong Cork Co., Lancaster, Pa., and I. F. Schnier Co., San Francisco, Calif.

DU PONT

REG. U. S. PAT. OFF.

150th Anniversary

BETTER THINGS FOR BETTER LIVING . . . THROUGH CHEMISTRY

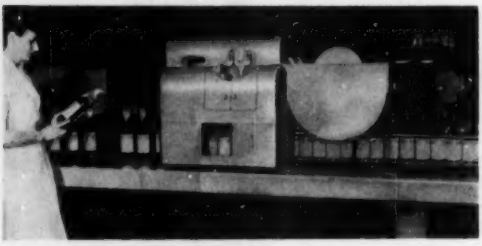
DU PONT "CEL-O-SEAL" BANDS

REG. U. S. PAT. OFF.

Equipment and materials

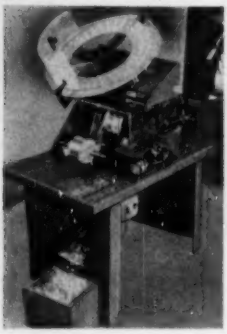
AN AUTOMATIC BOTTLE NECK BANDER

for use with the cellulose shrinkable-type bottle neck bands has been developed by Smith, Kline & French Laboratories, 1530 Spring Garden St., Philadelphia 1, Pa., and will be produced and marketed under contract by Economic Machinery Co., Worcester, Mass. The device was developed by the mechanical development section of the pharmaceutical manufacturing firm to solve its specialized problem of banding tiny bottles of water-purification tablets for use by the armed services. Other users of the bands became interested and machines were built and installed for various band and bottle sizes. The bander requires a single operator who may tend several of the units if located close together. Savings as compared with hand banding were said to have been from three to six employees, depending on size of bands, line speed and skill of employees. The bander is fed with a cellulose strip in roll form; it automatically feeds, cuts and applies printed or perforated bands in accurate and uniform register. The machine is designed for easy incorporation into existing packaging lines and is described as being mobile for meeting changing production schedules.



FULLY AUTOMATIC TABLET PACKAGING

is offered by Pak-Rapid, Inc., 530 N. 21st St., Philadelphia 30, Pa., in a new low-priced unit recently added to the company's Auto-Pak line. The machine strip packages tablets between two strips of heat-sealing tape, using cellophane, foil, Pliofilm or other coated or laminated heat-sealing papers in roll form. The equipment is designed to hold chipping or breakage to a minimum and to afford visual control and inspection of the product until it is actually in the package. The basic package produced is a double-row strip with each tablet in a separate airtight cell; cutting may be set to split the double row and to cut off at either one, two, four, six or 12 tablets of the double or single strips. Other count settings are available. Provision is made for a wide seal on one edge to permit later attachment to a match-book-type folder cover.

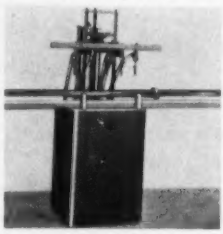


A ROUND BOTTLE SPOTTING DEVICE

which automatically turns and holds round bottles so as to secure the proper radial relationship between labels and other decorative bottle elements has been developed by Wright Machinery Co., Durham, N. C., a subsidiary of the Sperry Corp., as an accessory unit to the company's federal revenue-stamp labeler. The revenue-stamp-strip labeler, said to be the only machine on the market for automatically applying revenue stamps to bottles, is considered standard equipment with leading American distillers. Formerly, register problems restricted its use to pint and half-pint flask bottles; the new spotter permits extension of the stamper's use to round fifth and quart sizes. A rotating turret with six spotting heads utilizes a small lug on the base of the bottles to trigger a drive-roller disengaging mechanism which places each bottle in correct radial register before banding.

SEMI-AUTOMATIC BOTTLE FILLERS

in a new low-cost line are announced by Lipac, Inc., 475 Fifth Ave., New York 17. The new filler can be supplied with six to 12 filling valves adjustable to handle from one-ounce to gallon-sized containers of glass, metal or plastic. Equipment includes an 8-ft. adjustable guide track, vacuum pump, motor and automatic overflow system. The supply tank holding 15 gal. mounted at the rear of the filler is equipped with a float level-control valve. All contact parts are stainless steel and are said to be readily demountable for cleaning. The semi-automatic filler is designed to fill free-flowing, foamy or viscous liquids including vinegars, oils, sauces and shampoos.



HAND-OPERATED CAPSULE FILLERS

for filling gelatin capsules with pharmaceutical powders are being made by the Pharmaceutical & Chemical Industry Supply Corp., Div. of American Roland Corp., 16 Hudson St., New York 13. Four models are available, providing filling speeds ranging from 2,000 capsules per day to 2,000 capsules per hr. The model illustrated has an hourly capacity of 2,000 capsules. Construction is heavy and the manufacturer states that the units fill with precision accuracy and are simple to operate. The design permits the sanitary conditions of filling required for pharmaceutical work. Price is said to be low.

BLOW-MOLDED POLYETHYLENE JARS

have been announced by Plax Corp., West Hartford, Conn., and are said to be the first of their type to be made. The squat jar currently available is of 4-oz. capacity, but larger sizes may be available later, the company says. Cosmetics, drugs and other products commonly packaged in jars will obtain with the polyethylene containers advantages of greatly reduced shipping weight, ability of the container to withstand freezing of contents without cracking and virtual elimination of container breakage in shipment and use. The jar design features a bottom

NABISCO KLEENEX TISSUES VICKS PERSONNA EX-LAX Johnson & Johnson RIT
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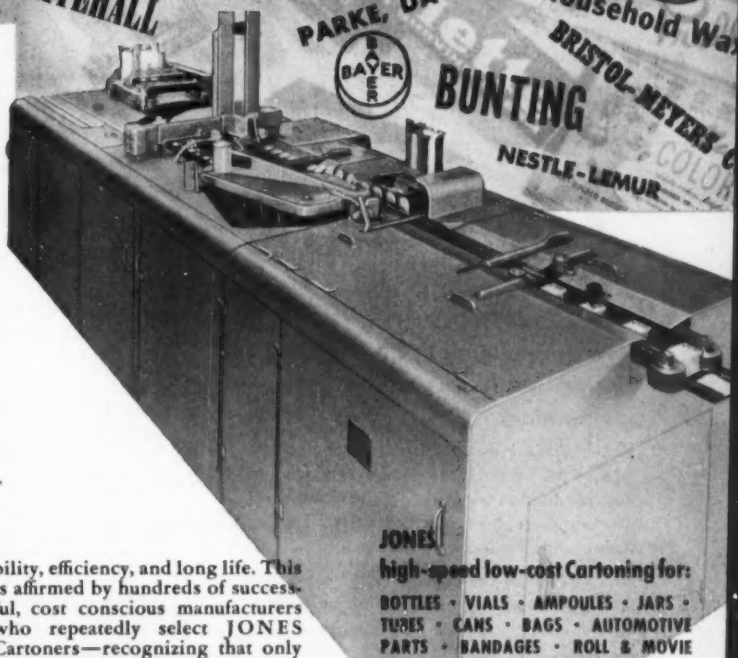
NABISCO SHREDDED WHEAT TAMPAX MENNEN McCORMICK Procter & Gamble Gillette
AMERICAN HARD RUBBER CO.
QUAKER MUFFETS Vaseline Wildroot GRIFFIN Ploughs, Inc. Amm-i-dent Abbott VENOPAX
MARVIN
JONES "CMC"
E·R·SQUIBB & SONS TUMS WHITEHALL Mrs. Wagner's Pies
HALO PARKE, DAVIS & CO. Household Wax
BAYER BUNTING BRISTOL-MEYERS
NESTLE-LEMUR MERCK & CO Esso

JONES FULLY AUTOMATIC CONSTANT MOTION CARTONERS



Feed and open cartons; insert single or multiple loads; glue or tuck flaps of cartons—airplane or reverse tuck. Fold and insert leaflets, booklets, corrugated liners; print or stencil code and other variable data. Feed and count small articles from hoppers or magazines. Readily convertible to different sizes of cartons and loads.

JONES Cartoners are operating steadily at speeds as high as 300 per minute. With many products, JONES Cartoners quickly pay for themselves at speeds as low as 30 per minute.

Today's JONES Cartoners are products of more than 30 years of designing and building cartoning machines. Constant research, mechanical improvement, detailed study of the characteristics of each product and package, assure reliability, efficiency, and long life. This is affirmed by hundreds of successful, cost conscious manufacturers who repeatedly select JONES Cartoners—recognizing that only the finest cartoning machines give the lowest cartoning costs.

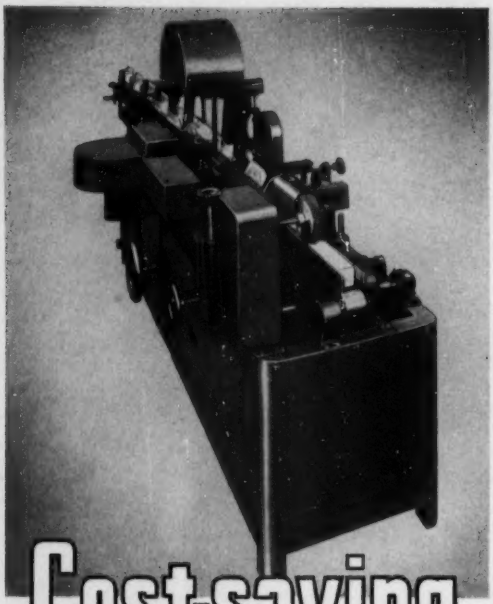
We will gladly furnish complete information to permit you to compare your present cartoning methods—and costs—with JONES cartoning.

JONES high-speed low-cost Cartoning for:

BOTTLES • VIALS • AMPOULES • JARS • TUBES • CANS • BAGS • AUTOMOTIVE PARTS • BANDAGES • ROLL & MOVIE FILM • CANDY • CARTRIDGES • ROLL COTTON • CHEWING GUM • STEEL WOOL PADS • COMBS • COOKIES • CRACKERS • CRAYONS • MEDICAL APPARATUS • ELECTRICAL PARTS • FACIAL TISSUE • PAPER NAPKINS • HARDWARE ITEMS • JAR RINGS & LIDS • PAPER PLATES • PIES • RAZOR BLADES • RUBBER SUNDRIES • SOAP • STOVE WICKS • SURGICAL • GAUZE • TAPE • TOBACCO • WAX CAKES • and others.

R. A. JONES & COMPANY, INC.

P. O. BOX 2055, CINCINNATI, OHIO



Cost-saving 'Generator'

New Peters Model CCY-L Folding & Closing Machine prompts money-saving ideas

Here's a machine that isn't content to save money all by itself. It generates packaging and production ideas . . . suggests new, improved, more economical ways of folding, lining and closing your cartons.

At least, that's the experience of companies who have seen and installed the new Peters Model CCY-L Carton Folding & Closing Machine.

Your investigation will be well worth while. Call or write . . . or send samples of your cartons for specific recommendations.

Peters

MACHINERY COMPANY

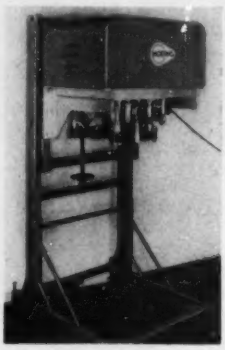
4712 Ravenswood Avenue • Chicago 40, Ill.

Equipment and materials

which nests with the neck of an uncapped jar, for easy handling and space-saving in shipment. Jars are supplied either translucent, to permit the color of contents to be seen, or in a range of colors. Labeling may be printed on the jars and special embossed lettering or designs may be obtained.

AN AUTOMATIC CAP TIGHTENER

designed so that it can be suspended over an existing conveyor line at any suitable spot is now in production by the Noring Machine Corp., Long Island City 3, N. Y. Sole agent for the new machine is Eastern Packaging Equipment Co., 29-15 Bridge Plaza North, Long Island City 1, N. Y. The Noring machine uses adjustable lateral belts which may be synchronized to conveyor-line speed to grip the containers as they pass through the tightener, where one pair of tightening disks turns caps to uniform tightness. Caps are applied and started by hand before containers reach the machine. No timing of container feed is required and production is said to be as fast as containers are fed, depending on their size. The unit is adjustable for container sizes from 1 oz. to 1 qt., cap sizes from 8- to 120-mm., and can accommodate conveyor heights from 25 to 47 in. Containers may be of glass, tin or plastic in any shape and it is said that caps may be of various shapes, materials and types.



FLUORESCENT SILK-SCREEN OIL-BASE COLORS

made with a modified oil base are being marketed nationally by Radiant Color Co., 830 Isabella St., Oakland 7, Calif., makers of Velva-Glo fluorescent products. Colors available are chartreuse, orange-yellow, orange, green, red, cerise and orange-red. They can be bought from silk-screen supply dealers in sizes from half-pints to gallons without license arrangements or royalties, according to the manufacturer. The colors are said to have a smooth, grit-free texture and produce a flexible, scuff-resisting film ideal for scoring and die cutting. As an illustration of drying qualities, the company says a double scrape with rounded squeegee through No. 8 silk dries to touch within 15 to 30 min., thoroughly within 4 to 8 hrs.

PUBLIC-SERVICE END LABELS

for bread packages now include a " . . . be sure to vote" label in red, white and blue offered by Marathon Corp., Menasha, Wis. Outsert bands with the same design are also available.

A VARIABLE-SPEED VIAL FILLER

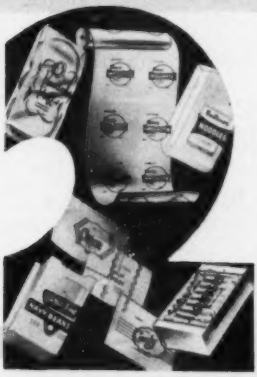
designed to deliver quantities from one drop to 4 oz. at speeds adjustable from 6 to 90 per min. is now available from National Instrument Co., 5005 Queensbury Ave., Baltimore 15, Md. The device is known as the Filamatic Model AB 4 automatic pipette and vial-filling machine. Speeds of 20 fills per min. are possible filling 4-oz. vials; smaller volumes permit the higher speed ranges. Foam-free delivery into containers such as ampoules and sprinkler-neck bottles is said to be possible even with low-vapor-pressure liquids such as acetone and alcohol. Volume control provides average accuracy of fill up to 0.1% regardless of

Now, LAMCOTE® offers You THREE SPECIALIZED SERVICES to Stimulate Your Sales!

● LAMCOTE PACKAGING

the finish that starts sales!

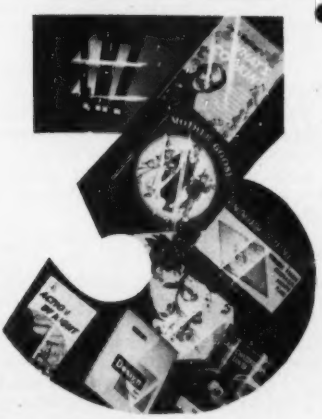
Sparkling, transparent LAMCOTE adds extra lustre . . . extra vitality . . . extra *selling power* to your package! In either the regular or the "Showcase" window styles, LAMCOTE packages keep their "factory-fresh" appeal on shelves and counters—resist soiling, wipe clean instantly. Follow America's leaders in every important industry—glamorize *your* package with LAMCOTE to "spotlight" your product at the point of sale!



● LAMCOTE *MULTI-COLOR* PRINTING

on Transparent Films and Similar Materials

The newest LAMCOTE service, created in response to nationwide customer demand! New *self-selling* packages printed in vivid color, perfectly reproduced on all types of plain or laminated cellophane, acetate foil, pliofilm, polyethelene, and other hard-to-print materials. Complete converting facilities for your choice of bag, roll, or sheeted wrap—a truly *modern* package for modern retailing methods!



● LAMCOTE FINISHING

"Reflects the Quality of Quality Products"

Rich, gleaming LAMCOTE finish makes your fine printed pieces look *even better*—gets added attention for your catalogs, brochures, novelties, calendars, and other promotional material. Protects and beautifies every printed surface—makes colors richer, livelier. LAMCOTE-processed P. O. P. displays stay clean and fresh—win dealer preference for maximum impact. Let LAMCOTE "eye appeal" put extra "buy appeal" into *all* your printed advertising!

WRITE TODAY for FREE LAMCOTE samples and ideas!

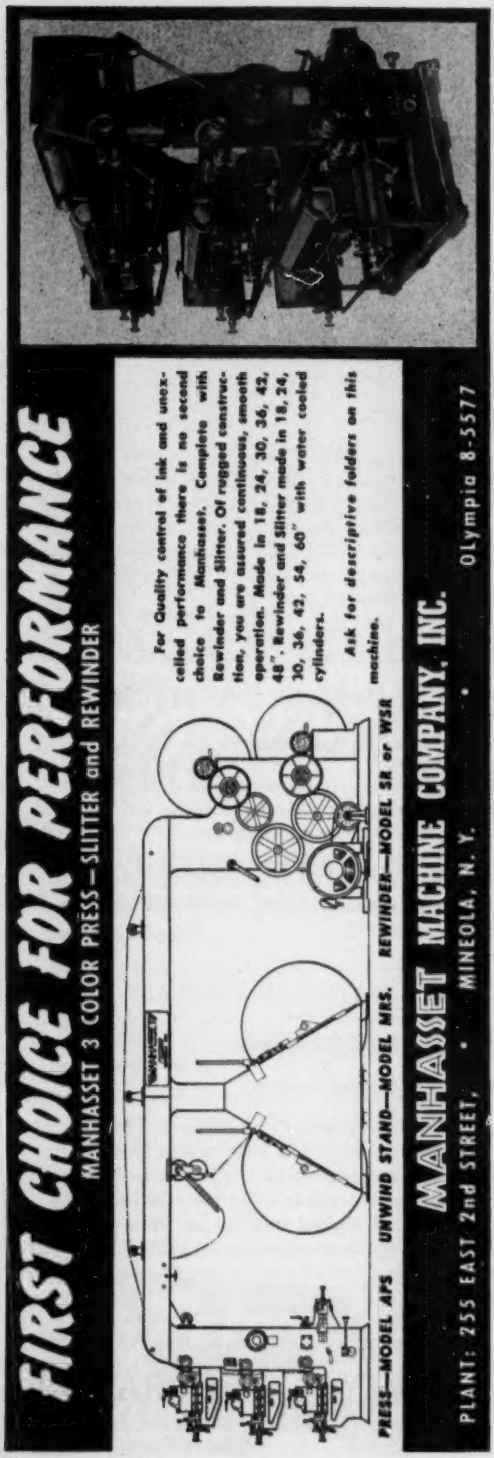
LAMCOTE PACKAGING DIVISION OF

ARVEY CORPORATION

SINCE 1905

3462 N. KIMBALL AVE., CHICAGO 18, ILL.

PLANTS AT CHICAGO • JERSEY CITY

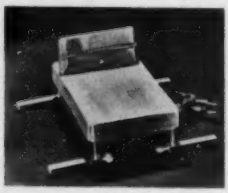

FIRST CHOICE FOR PERFORMANCE
MANHASSET 3 COLOR PRESS—SLITTER and REWINDER
For Quality control of ink and unexcelled performance there is no second choice to Manhasset. Complete with Rewinder and Slitter. Of rugged construction, you are assured continuous, smooth operation. Made in 18, 24, 30, 36, 42, 48". Rewinder and Slitter made in 18, 24, 30, 36, 42, 54, 60" with water cooled cylinders.
Ask for descriptive folders on this machine.
PRESS—MODEL APS UNWIND STAND—MODEL MRS. REWINDER—MODEL SR or WSR
MANHASSET MACHINE COMPANY, INC.
PLANT: 255 EAST 2nd STREET, • MINEOLA, N. Y. • Olympia 8-5577

Equipment and materials

variation of bottle size and a graduated micrometer mechanism permits duplicating of any desired setting. Operating speeds over the entire range are instantly adjustable. The unit is completely portable and fills directly from any drum or container. The filling unit, of type 18-8 stainless steel, is easily removable for cleaning or sterilization. Bench space occupied by the Filamatic Model AB 4 is 8 by 11 in.

A HEAVY DUTY HOTPLATE

made of highly durable aluminum alloy, designed primarily for heat sealing of film in supermarket pre-packaging is now being produced by Cleveland Lathe & Machine Co., 5400 Brookpark Rd., Cleveland 29, Ohio. Named the Model 54, the new unit has a plate surface 54% thicker than previous models, to withstand a great deal of abrasive action. It is felt this feature will find favor in a number of industries in addition to supermarkets. The hotplate has thermostat control and selection of temperatures from 175 to 600 deg. F. The bumper block for end sealing is flat on one side and grooved on the other side for sealing around various types of nesting paper trays. A reflector board beneath the heating elements protects anything under the unit and conserves power; the unit may be used in the open or recessed in a wrapping table. Thumb-screw-set mounting lugs permit easy mounting in any position and ceramic insulation is provided to protect mounting surfaces.



RE-USE QUART DECANTERS

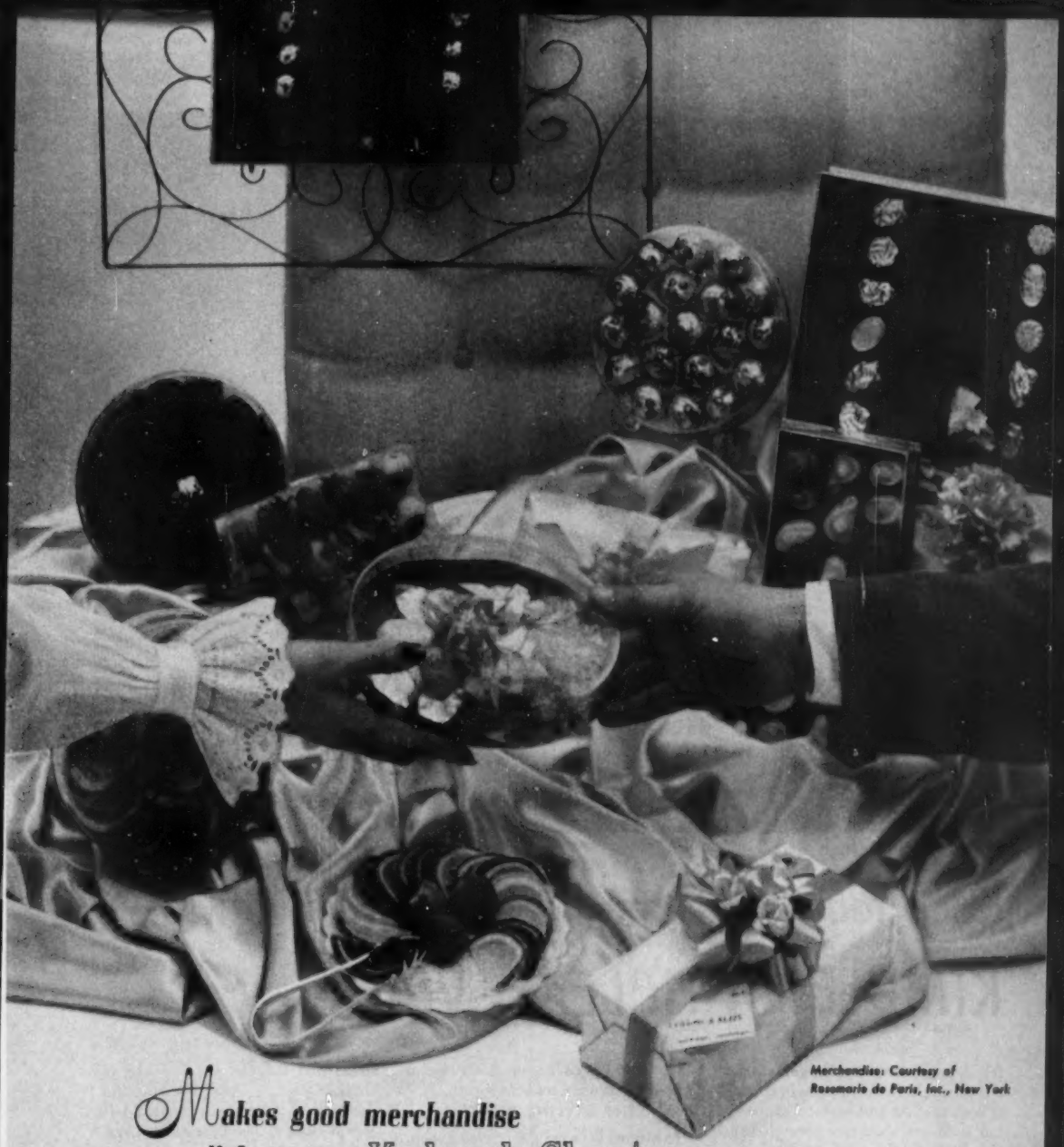
suitable for the packaging of a wide variety of products have been recently introduced by Owens-Illinois Glass Co., Toledo, Ohio. The decanters are produced in two shapes: a stock round shape and a square-shaped model especially designed for re-use as a home refrigerator storage container. The 70-mm. finish makes the new wide-mouth decanters suitable for packaging of hard candies and other non-liquids, as well as juices, syrups, etc. The finish size permits ice cubes to be dropped into the container when re-used as a refrigerator container or fruit juice dispenser for table service.

DISTINCTIVE HOLIDAY RIBBONS

of rayon satin, decorated with a design of poinsettias, stars and holly wreaths, are featured in the Christmas gift-wrapping line of Taffel Bros., Inc., 93 Madison Ave., New York 16, N. Y. The ribbons come in red, royal blue, emerald and white, and are supplied in 2⅝- and 4⅛-in. widths. In a 50-yd. bolt, the ribbons sell for 9¢ and 14 cents a yard, respectively.

HEAT-RESISTING POLYSTYRENE

which will withstand temperatures as high as 220 deg. F. when properly molded has been developed by The Dow Chemical Co., Midland, Mich. The new material, now being produced in commercial quantities, is known as Styron 700. In addition to its improved heat-distortion characteristics which resist temperatures 20 deg. higher than general-purpose polystyrene, the new material is said to be equal or better in other physical



Merchandise: Courtesy of
Rosemarie de Paris, Inc., New York

Makes good merchandise sell better . . . Kodapak Sheet

"Kodapak" is a trade-mark

Candy that's been packaged in tough, transparent Kodapak Sheet is something apart . . . brilliantly visible, alluring—*clearly untouchable.*

Stores give candy like this top display. Sales people show it . . . customers see it—want it—buy it, knowing right well that quality and purity have been protected.

For further information, please consult your local representative or write:

Cellulose Products Division
Eastman Kodak Company, Rochester 4, N. Y.

Sales offices in New York, Chicago, Dallas. Pacific Coast distributor: Wilson & Geo. Meyer & Co., San Francisco, Los Angeles, Portland, Seattle. Canadian distributor: Paper Sales Limited, Toronto, Montreal.

Kimble Opticlear Vials come in eight popular sizes

Keep food products dry and attractive with KIMBLE OPTICLEAR VIALS

Modern food and confectionery merchandising demands packaging which is both modern and useful. On the retail shelf and counter, your package should catch the customer's eye and close a sale. On the pantry shelf, it should keep contents fresh and dry.

Kimble Opticlear Vials give your product such a package. Opticlear Vials are gleaming and crystal clear. Their special plastic stoppers seal tightly, shut out moisture and air. Here's how they solved a packaging problem for one confectionery manufacturer.

THE SKYLINE STORY

Problem: B-Deks, a food decoration manufactured by Skyline Products, Inc., was originally packed in transparent bags. Once the bags were opened, air entered and discolored the contents. Even more of a problem, tiny B-Deks worked their way through folds at the bottom of the bag and rolled around the cabinet shelf.

Solution: B-Deks were packed in Kimble Opticlear Vials. The beautiful glass walls of these practical containers show B-Deks to their fullest advantage. And special stoppers seal tightly even after repeated opening and closing. Now, B-Deks win more sales . . . make more profits.

See how attractive your product can look in Kimble Opticlear Vials. Send us the sizes you use and we'll ship free samples for your inspection.

KIMBLE GLASS COMPANY

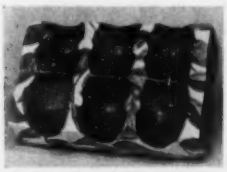
Toledo 1, Ohio

Subsidiary of Owens-Illinois Glass Company

properties. Styron 700 is expected to extend the field of application for polystyrene in many uses, including new packaging applications.

AN ORCHARD-TO-MARKET APPLE CARRIER

called the Fanci-Pak unit has been introduced by Alford Cartons, Ridgefield Park, N. J. Designed to hold six or eight selected apples, the new carrier is printed in a green leaf pattern to accentuate the color of the fruit. It may be used to carry the fruit from the time it is picked until it is sold, thereby eliminating intermediate handling and possible bruising. Apples nested in the separate compartments of the Fanci-Pak unit may be shipped in corrugated cases with no other separators or dividers. The company points out that the apple carrier makes supermarket merchandising methods for apples possible for every grocer or produce market and serves to place the packer's or grower's name before consumers.



A MILK-CONTAINER CASE PACKER

that loads filled paper milk containers automatically has been introduced by Standard-Knapp, division of Emhart Mfg. Co., Portland, Conn. One of the units is said to be already in operation at a large Eastern dairy. The machine, which operates hydraulically, can load at speeds up to 160 containers or eight packed cases per minute. Pack arrangement is five by four by one. The machine is designed for use with flat-topped containers, but equipment to handle the gable-type containers is being made available as well, the company reports.

The case packer is built to comply with existing sanitary codes, with stainless steel used for all parts that may come into contact with milk spilled within the unit and the entire load-forming and casing assemblies can be removed for cleaning. The unit is designed to be conveyor fed and requires an operator to position empty cases to receive the formed loads.

PORTABLE TRIPODS FOR GRAVITY CONVEYOR

sections, now being made by Speedways Conveyors, Inc., 1207 Niagara St., Buffalo 13, N. Y., can be used with most makes of conveyors, the company states.

The new conveyor supports have 3-in. hard rubber casters for easy movement of conveyor sections over factory floors and rapid re-arrangement of lines. The stands do not require bolting to conveyor sections, the company states, so they can be quickly set up. The new tripod stands are available in three sizes and special stands can be supplied for special height adjustments that may be required.

HOLIDAY FLEXIBLE PACKAGING SPECIALTIES

including plastic Christmas stockings suitable for use as a package for candy or other food products, toys or specialties, are being offered by the Mehl Mfg. Co., Division of Sidney-Thomas Corp., 2057 Reading Rd., Cincinnati 2. The plastic stockings are available in four sizes, with and without handles. Bags with a wide variety of uses in Christmas packaging are offered,

CONVEY-O-MAT

tuck end carton set-up machine

with conveyor loading

Model 54 CONVEY-O-MAT discharges cartons 41" above floor. Occupies only 24" x 48" floor space.

Cuts labor costs

Runs wide range of carton sizes

Synchronizes with your production line

Fast change-over time

3500 cartons per hour output

Low initial cost

Model 54 CONVEY-O-MAT delivers the set-up carton in an upright position on the conveyor ready to receive your product. Attendant can help load product or inserts in her spare time.

Model 50 TUCK-O-MAT delivers set-up tuck end cartons to your container or packing table.

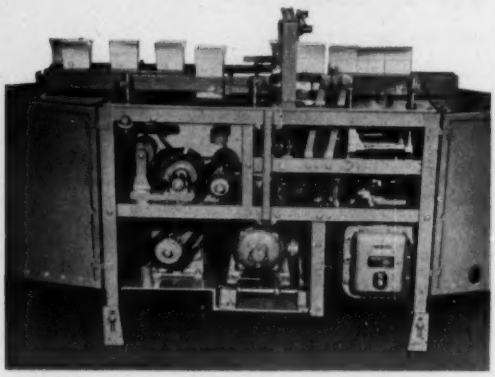
SEND US YOUR CARTONS AND OUR ENGINEERS WILL GLADLY MAKE RECOMMENDATIONS

Machinery Mfg. co. inc.

2431 Dallas Street, Los Angeles 31, California

Dist. by New Jersey Machine Corp., Hoboken, Cincinnati, Chicago, Los Angeles

The SURE-WAY Automatic Checkweigher . . .



Interior View of SURE-WAY Checkweigher

For: ***Better Cost Control***
Sounder Quality Control

The SURE-WAY Checkweigher automatically checkweighs and sorts filling line output into three classifications . . . overweight . . . underweight . . . correct weight. Since this weighing unit is not affected by wet, steamy or dusty working conditions it is ideal cost and quality control equipment for volume operations in canneries, seafood plants, condensaries, dairy products plants, all bottling operations and breweries as well as all types of frozen food packaging. Filling machine output is mechanically sorted at speeds up to 100 units per minute (this speed for packages of 16 ozs. to 20 ozs. down). Tolerance is adjustable within most any limits practical for the average packaging line. Here is proven equipment that (1) speeds production (2) saves product (3) materially cuts labor costs. SURE-WAY handles containers of any material . . . and in any size that will stand on a conveyor belt up to 8"x3½"x15" to a weight capacity of 10 lbs. Three different models are available. Write for details to fit your operation.

Sales & Service from Coast to Coast

EXACT WEIGHT SCALES
Industrial Precision
THE EXACT WEIGHT SCALE COMPANY
914 W. Fifth Ave., Columbus 8, Ohio
2920 Bloor St., West, Toronto 18, Canada

Equipment and materials

printed in holiday designs and colors, in either polyethylene or cellophane. As Christmas gifts for small retailers to offer their trade, the company suggests imprinted re-usable plastic food-saver bags and plastic garment bags, which keep the retailer's name in sight in the customer's home.

A NEW COLLAPSIBLE TUBE CLOSER

has been announced by the Perl Machine Mfg. Co., 68 Jay St., Brooklyn, N. Y. This new "Magic" machine makes a neat and secure closure without crimping or use of clips. As the company describes the operation, tubes are closed with three folds in one revolution, two folds in one direction, one in a reverse direction. Interchangeable tube holders are available with the unit to accommodate tubes from ¾ to 2¾ in. in diameter. Speeds are up to 50 tubes per min. even with an unskilled operator, as tubes are merely inserted into the holder and foot-pedal depressed. The machine automatically closes the tube and stops itself, then is ready to accept another. Tube does not have to be turned to obtain folds.

POLYETHYLENE POULTRY BAGS

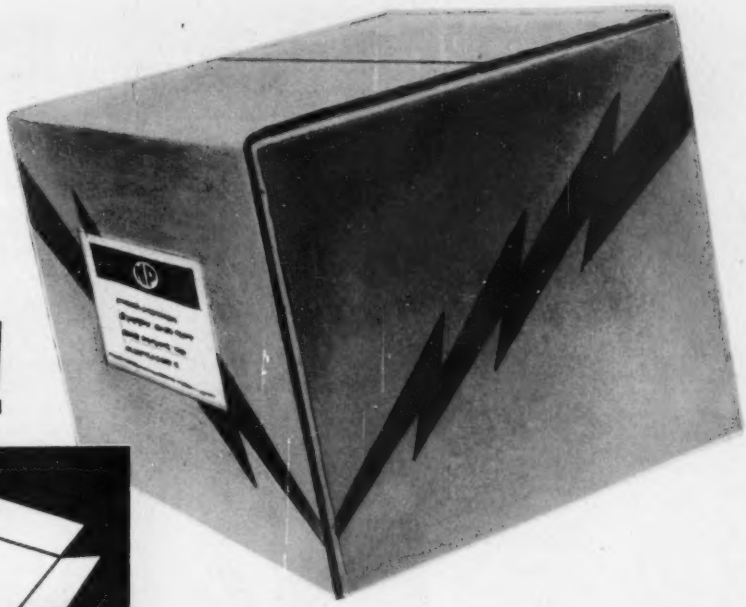
designed primarily for freezer use are announced by the Dobeckmun Co., Cleveland, Ohio. They are heat sealing and suitable for use with vacuum-packaging equipment. Four sizes are available for whole or cut-up poultry. The company points out that moistureproof polyethylene retains its resiliency and flexibility under extremely low temperature and protects frozen products from freezer burn or weight loss through freezing and frozen storage.

A NEW VINYL FILM FOR PACKAGING

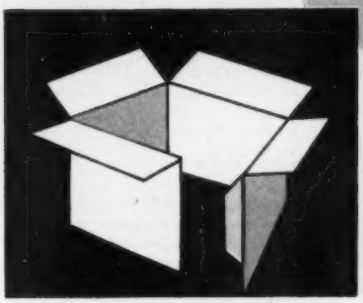
has been announced by The Goodyear Tire & Rubber Co., Akron 16, Ohio. The new material, designed to meet the demands of vinyl film fabricators and convertors, is a special type of Pliofilm designated as Pliofilm 80VW (80 gauge in thickness). The company's development department claims the new film will not cling to or pucker the packaged product. It is said to be tear resistant and transparent. The plasticizer will not bleed, thus eliminating a major cause of blocking of some films and packaged products, according to the company.

A NEW LOW-COST BLACK AND BROWN UREA

plastic material has been announced by the Plaskon Division, Libbey-Owens-Ford Glass Co., Toledo 6, Ohio. The new molding compound provides urea's electrical and physical properties in a price range which the company says is below that of any standard molding compound: $0.1875 per lb. for quantities over 20,000 lbs. Color uniformity and light fastness, plus nonbleeding properties when immersed in water, are among the qualities listed. Wiring devices have been the fastest-growing commercial uses of the new urea, but the company expects the compound to find a number of other uses, including bottle closures.



NEW!



GLUED CORNER JOINT

Stronger than the Boxboard itself!

BETTER PROTECTION FOR YOUR PRODUCTS. Tests prove it: drum tests, compression tests, tensile-strength tests all show that there is no stronger corner joint than a *glued* joint made with DAREX RESIN EMULSION ADHESIVE. This *extra* strength provides *better protection* for your products during handling, storing and shipping.

SIFTPROOF. A glued corner joint is *siftproof*, which means *better protection* against dust and dirt . . . especially for bulk products.

WATER-RESISTANT. DAREX RESIN EMULSION ADHESIVE is an *extremely* water-resistant glue of immense strength. Even when wet, a *glued* corner joint retains its giant grip. *There are no wire stitches* to pull out or to snag and damage your products.

PRINT ALL OVER. There is nothing to cover up or interfere with all over printing. Your shipping cases can be transformed into "traveling billboards". Since it's estimated that the average shipping box is worth over 150 advertising "impressions", this is a powerful yet inexpensive way to build product identification.

Ask your box maker about "The box with the *glued* corner joint".

DEWEY and ALMY
Chemical Company

Plants and sales offices throughout the world.

In this advanced method of forming the corner joint on corrugated shipping cases, *most* box makers use DAREX RESIN EMULSION ADHESIVE. It is a result of Dewey and Almy packaging research . . . a continuing research program that has brought to the packaging industry such varied Dewey and Almy products as: resin emulsion adhesives for boxes, bags, and tape; packers' adhesives; the CRYOVAC process for food packaging; sealing compounds for cans, jars and drums; thermoplastic inner-coatings for collapsible tubes.

Want more facts? WRITE TODAY!

Dewey and Almy Chemical Company
Cambridge 40, Mass.

. . . I am a box maker . . . a box user

Please send without obligation complete information about Glued Lap Joint boxes made with Darex Resin Emulsion Adhesives.

Name.....

Company.....

Title.....

Address.....

Plants and people

The Aluminum Co. of America, Pittsburgh, has appointed **W. S. McChesney** as manager of foil sales, succeeding **T. A. Torrence,** who will continue with the company as chief technical consultant on foil sales.

ALCOA has announced that it will undertake the construction of a 400-million dollar aluminum-smelting project in Alaska as soon as the necessary land can be purchased and Government approvals obtained. The company has estimated that the development will require about four years to complete.

Two additions to the sales staff of the **Warner Bros. Co.,** Bridgeport, Conn., boxmakers, have been announced. **Jack W. Bray,** cosmetic packaging specialist, is now attached to the New York sales office. **Arthur A. Bliss** is now a sales representative in the Boston area, operating from the company's new Boston office in the Little Bldg.

Faustin J. Solon, vice president of **Owens-Illinois Glass Co.,** Toledo, Ohio, has been named to serve on the National Distribution Council by Secretary of Commerce Charles Sawyer. The Council, made up of business and industry representatives, acts as an advisory committee to the Secretary on economic matters related to distribution.

Allen Cartons, Inc., Dayton, Ohio, has elected **James A. Strong** as vice president and director. Mr. Strong's activities will include the sales direction of major accounts.

E. R. Livingston, vice president and general manager of the machines and machinery division of **Doughboy Industries, Inc.,** New Richmond, Wis., has been elected a member of the company's board

E. R. Livingston (left) and J. A. Ferris

of directors. **Joseph A. Ferris** has been named vice president of the company. Mr. Ferris will have charge of a new national program of public relations for all divisions of the company.

The John Waldron Corp., New Brunswick, N. J., producer of machines for converting paper, plastics and textiles is celebrating the 125th anniversary of its founding. One of the leaders in the converting-machine industry, Waldron "firsts" include the Waldron Microjet coater, Syncroset coater, the reverse roll coater, the Heliofast multicolor printing process for paper and textiles, the Diatron coater and the Waldron web guide.

Charles A. Breskin, president and publisher of MODERN PACKAGING and *Modern Plastics,* has been presented with the Order of Orange-Nassau with the rank

Baron J. A. de Vos van Steenwijk (left) congratulating Charles A. Breskin

of Officer by Baron J. A. de Vos van Steenwijk, Consul General of the Netherlands. This high honor was conferred at the direction of Queen Juliana in recognition of Mr. Breskin's aid to the Netherlands people in rebuilding their economy and commerce following World War II. Mr. Breskin during that period placed himself at the disposal of the Netherlands Trade Commission in counseling Dutch industry on the latest techniques of modern, high-speed mass packaging of consumer and industrial products as currently practiced in the United States.

George M. Burrus, assistant to the president of **United Board & Carton Corp.,** New York, has been elected vice president in charge of board sales and public relations. **Guy E. Ronald** has been appointed New York sales manager of United's Carton Div.

The Food Machinery & Chemical Corp., New York, has announced the election of **Joseph B. Carey** as chairman of the executive committee. **Ernest Hart** has been named an executive vice president in charge of the company's chemical divisions and will headquarter in the Chrysler Bldg., New York. **Benjamin C. Carter** has been made an executive vice president responsible for supervising the mechanical divisions, with headquarters in San Jose, Calif. **J. C. Vernon** succeeds Mr. Hart as president and manager of the Niagara Chemical Div., with headquarters at Middleport, N. Y. **Jack M. Pope** has been elected controller.

John Roosevelt, youngest son of the late President Roosevelt, has been named president of the **McKay-Davis Packaging Corp.,** West New York, N. J. The new company will service the pharmaceutical and food trade in the East with custom strip packaging. The firm will also encourage sales of Dismat strip packaging machines, manufactured by the McKay-Davis Chemical Corp. of Toledo, Ohio.

J. Roosevelt

The Hinde & Dauch Paper Co., Sandusky, Ohio, has announced the completion of extensive remodeling of its package laboratory. Numerous changes and improvements have been made to increase the working area and relocate equipment for more efficiency. The laboratory is divided into two sections: an engineering section for the development of new containers and materials-handling methods and a testing-analysis section.

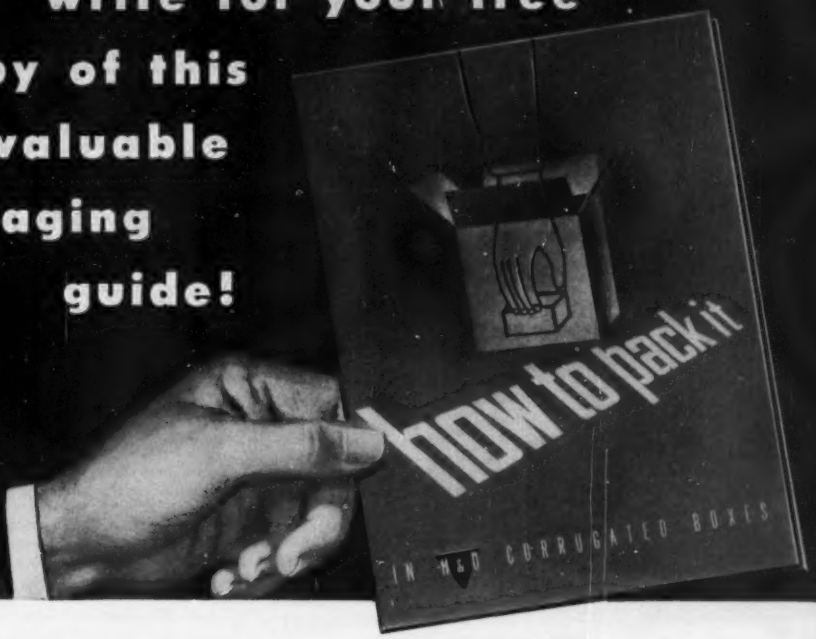
E. S. & A. Robinson (Canada), Ltd., Seaside, Ont., producer of cartons and bags, has announced that **Hector Godfrey,** senior managing director, will shortly return to England to rejoin the parent company. Mr. Godfrey's place has been filled by **Charles Rough. L. T. Davies** has been made an executive vice president. In addition to Mr. Rough and Mr. Davies, other members of the board include **V. D. Strickland** and **A. D. Stockwood.**

The American Box Co., Cleveland, Ohio, manufacturer of wirebound containers, has appointed **Glenn E. Maxfield** as plant superintendent. Mr. Maxfield indicated that newly installed production equipment and a streamlining of facilities is enabling American Box to meet increasing demands for containers.

American Machine & Foundry Co., New York, has elected **Stanley de Jongh Osborne** to its board of directors. Mr. Osborne has been financial vice president of Mathieson Chemical Corp. since 1950 and was formerly a vice president of Eastern Air Lines.

American Seal-Kap Corp. of Delaware,

write for your free copy of this valuable packaging guide!



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it's definitely worth your while to have this informative H & D book. To obtain a copy, mail the coupon below.

"How To Pack It" will save you time, money and headaches on countless shipping and packaging problems. Package Engineers everywhere use it as a handy reference manual . . . as a catalogue of valuable data on corrugated boxes. You'll find it valuable, too, as an idea-stimulator; it may suggest an improved packing program for your product . . . a program of better product protection, reduced packing costs, increased sales! Write, or mail coupon below, to HINDE & DAUCH, 3514 Decatur Street, Sandusky, Ohio for your free copy.

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SCALES

Plants and people

producer of closures for milk bottles and other containers, has announced the formation of **Constellation Cup Corp.** as a wholly owned subsidiary. The subsidiary company is engaged in the manufacture of paper hot-drink cups marketed under the trade name "Constellation Cups." **Daniel A. Mackin** is president of the new company; **Harold T. Edwards, Carl W. Goodwin** and **John C. Davis** are also vice presidents of the new organization. **J. Werden** is secretary-treasurer.

Anthony F. Thomas has been appointed district manager of films and flooring sales by **The Goodyear Tire & Rubber Co.**, Akron, Ohio. Mr. Thomas will direct sales activities on Pliofilm, vinyl film, vinyl and rubber flooring in Illinois, Indiana, Michigan, Wisconsin, Minnesota, North Dakota, South Dakota, Iowa, Missouri, Kansas and sections of Kentucky and Tennessee.

A. F. Thomas

The Plax Corp., West Hartford, Conn., manufacturer of the squeezable bottle and other plastic products, has appointed **Andrew J. Arcell** as sales service manager. Mr. Arcell will headquarter at West Hartford. **Russell E. Ames** has been named sales engineer in the Philadelphia office of Plax.

Mohlman & Reis, Inc., production and engineering consultants and designers of special automatic machines, have announced that they are now operating from a New York office at 110 Washington Pl., New York 14. The firm acts as consultant on sales, management and engineering, particularly in the packaging field.

Dr. Howard T. Hovde has been elected vice president and consultant of **The Econometric Institute, Inc.**, New York.

American Wood Products Corp., Marion, S. C., subsidiary of **The American Box Co.**, Cleveland, Ohio, has acquired a new veneer mill at Millry, Ala., to increase veneer supplies for stepped-up container production at both plants. New mill operations are under the direction of **Henry S. Kubes**, vice president and manager of manufacturing and purchasing. **R. L. Finan** is mill manager.

J. William Harlow has been appointed production superintendent of the Canadian plant of the **Arner Co.**, Buffalo, N. Y., pharmaceutical manufacturers. Mr. Harlow takes over the duties of **B. L. Leavy**, who is relinquishing manufacturing responsibilities to concentrate on sales developments.

The Apex Printing Machinery Co., Inc., has announced the removal of its offices and plant to a new four-story building at 210 Elizabeth St., New York 12.

The Automatic Packaging Corp. of Los Angeles has announced a new service now available to Western manufacturers. The firm offers a completely automatic packaging service for the packaging of small and medium size products such as foods, powders, soaps, candies, small hardware and toys in plastic, foil or paper heat-sealed bags up to 5¾ by 13 in., with a capacity ranging from 1 g. to 1 lb.

British Cellophane, Ltd., London, England, has announced a change of address. The company is now located at 12/13, Conduit St., London, W. I.

The Brockway Glass Co., Brockway, Pa., has appointed **Paul R. Morrow** as supervisor of its food, pharmaceutical and proprietary divisions, with headquarters at Brockway. Mr. Morrow formerly headed the general service functions, which will now be handled by **Edward C. Faust.**

Colin Gardner, III, vice president of **The Gardner Board & Carton Co.**, Middletown, Ohio, has been appointed to the Government's Wage Stabilization Board. Mr. Gardner is one of six members of the board representing industry. Mr. Gardner is also vice president of Dairypak, Inc., Cleveland, and a director of the Manchester Machine Co., Middletown.

C. Gardner

Two promotions in personnel have been announced by the Gardner firm. **Ray Fields** has been named beater foreman in the company's Lockland board mill. **Norman Ohler** has been made a staff assistant in the finance department.

The Hurlbut Paper Co., South Lee, Mass., has elected **Frank C. Brinster** treasurer and director of the company.

The resignation of **J. H. Friend**, vice president of **International Paper Co.**, New York, and general manager of its Southern Kraft Div., has been announced. Mr. Friend will continue to serve as a member of the board of directors and will be available in a con-

WHAT IS A LABEL?

It is the identification of a product . . . *a mark.*
—a mark by which the buying public selects a product . . . *a brand.*
—a brand of distinction used by the manufacturer to distinguish his product from others.

It is the *seal of confidence.* Confidence expressed by the public every time this label is purchased . . . confidence expressed by the manufacturer as representing a product he is proud to show.

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Dennison Mfg. Company
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Framingham 3511

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Exbrook 2-5102

Ever-Ready Label Corp.
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Belleville 9, New Jersey
Belleville 2-5500

Fenton Label Company
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Gaspee 1-2386

Grand Rapids Label Co.
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Grand Rapids 8-1133

A. Kimball Company
307 West Broadway
New York 13, N.Y.
Canal 6-2300

Paramount Paper Products Company
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Omaha 11, Nebraska
Kenwood 6844

The Reyburn Mfg. Co., Inc.
16th St. & Indiana Avenue
Philadelphia 32, Pa.
Radcliff 5-4587

Shuman Labels
600 West Jackson Blvd.
Chicago 6, Illinois
Central 6-8708

Tompkins' Label Service
Frankford Ave. at
Allegheny Ave.
Philadelphia 34, Pa.
Regent 9-1821

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161 Leverington St.
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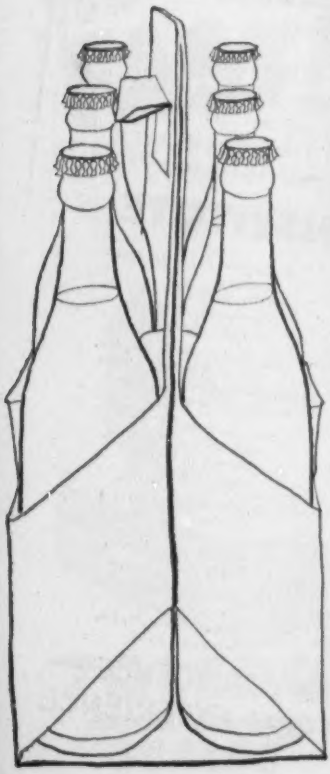
putting the right qualities in adhesives for bags, bottles or books



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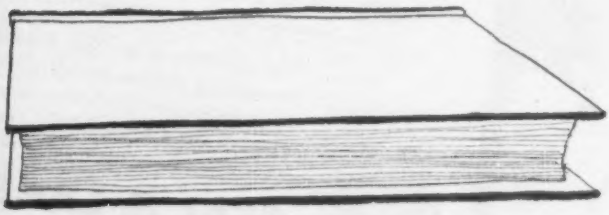
Ortho-Nitrobiphenyl
Dimethyl Phthalate
Dibutyl Phthalate
Santicizer* 160
Santolite* MHP
Santolite MS (80%)
Tricresyl Phosphate
Triphenyl Phosphate

For Heat-Sensitive Adhesives:
Diphenyl Phthalate
Santicizer 1-H
Santicizer 3
Santicizer 9

For Hot-Melt Adhesives:
Dibutyl Phthalate
Santicizer 160
Santicizer 8
Santicizer M-17

For Nontoxic Adhesives:
Santicizer 141
Santicizer B-16
Santicizer E-15



You can select the qualities you want in adhesives for bags, bottles, or books by choosing a Monsanto Plasticizer. In the large family of Monsanto Plasticizers you'll find one or more that exactly fits your needs whether you're making hot-melt, tacky, nontoxic or heat-sensitive adhesives.

The trend is away from the old-fashioned glue pot. It's toward the modern adhesives that give efficient bonding between widely varied materials and meet the needs of high-speed machines for labeling, sealing or fabricating.

Monsanto Plasticizers serve in adhesives based on polyvinyl acetate, zein, casein, polyvinyl butyral, styrene, ethyl cellulose and vinylidene chloride.

When your customers call for adhesives to meet their special needs, investigate the qualities you can attain by using Monsanto Plasticizers. For information on the use of Monsanto Plasticizers, which are available for prompt delivery, contact the nearest Monsanto Sales Office or MONSANTO CHEMICAL COMPANY, Organic Chemicals Division, 1700 South Second Street, St. Louis 4, Missouri.

*Reg. U. S. Pat. Off.

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SERVING INDUSTRY... WHICH SERVES MANKIND

Plants and people

sultant capacity on special projects. Succeeding Mr. Friend as general manager of the Southern Kraft Div. will be **Erling Riis,** vice president and assistant general manager.

International has opened a new Bagpak Div. sales office at 401 Kindelberger Rd., Kansas City, Kan., headed by **O. W. McDuffie.**

Diagraph-Bradley Industries, Inc., Herrin, Ill., have added Link Junior and Link Superior gummed tape dispensers and label moisteners to their line of shipping room equipment and supplies. Dies, tools, fixtures and inventory purchased from **L. Link & Co.,** New York, have been moved to Herrin.

Matthew G. O'Connor has been appointed sales manager of **Modern Containers,** Los Angeles, Calif. Mr. O'Connor was formerly West Coast manager of the Celanese Corp. of America. Modern Containers has also appointed **William J. Lynch** as sales service manager. Mr. Lynch has had wide experience with the cellophane and flexible packaging field.

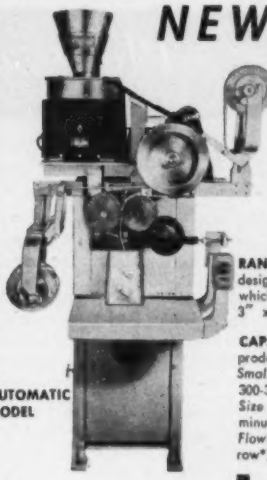
M. G. O'Connor

Robert C. Ewer has been named assistant sales manager of the **Empire Box Corp.,** Garfield, N. J. Mr. Ewer, who has been in the packaging field for over 20 years, will work in the New York area. **George B. Kamerer** has joined the sales staff of Empire and will also cover the metropolitan New York area. **T. W. Ross,** vice president in charge of sales for Empire, is taking an extended leave of absence from business duties.

The Haring Equipment Corp., New York, distributors of the Kalix line of tube filling machines and other automatic equipment, has appointed **Clarence W. Beals** as representative for Minnesota, North and South Dakota, parts of Iowa and upper Wisconsin.

Kimberly-Clark Corp., Neenah, Wis., manufacturer of paper and wadding products, has appointed the **Chicago Paper Co.,** 801 S. Wells St., Chicago, as distributor of Kimpak cushioning material and certain other branded wadding products.

N. T. Gates Co., Philadelphia, has been appointed distributor for Nox-Rust rust preventative oils and compounds and



AUTOMATIC MODEL

NEW! WRAP-ADE
UNIT PACKAGERS

The WRAP-ADE UNIT PACKAGERS are low cost machines that perform an entire cycle of packaging operations—including feeding, filling, forming and sealing. They have been built on the simplest possible principles conducive to high speed automatic packaging, versatility, and low upkeep costs. The variety of products handled is limitless and practically every type of heat sealing material can be used.

SEMI-AUTOMATIC MODEL

RANGE OF SIZES: Can be designed for any products which require packages up to 3" x 7".

CAPACITY: (Depends on product. Below are examples.) *Small items*—such as Tablets: 300-350 per minute. *Units the Size of a Bottle Cap:* 125 per minute (single row*). *Free Flowing Powder Packets:* 2" x 3"—70 per minute (single row*). *Duplex Feed, where practical, will double speed.

FEEDING MECHANISMS FOR ALL TYPES OF PRODUCTS:

- Conveyor
- Magazine
- Rotary Table
- Volumetric Filler
- Automatic Hoppers

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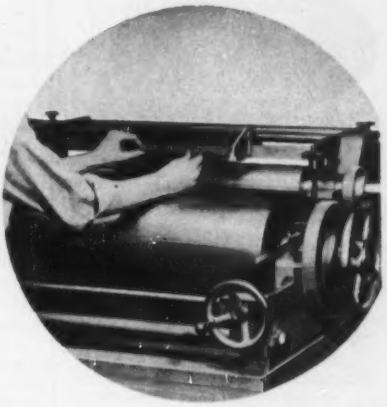
- Set up rubber plate jobs in one-fifth the time!
- Avoid loss of press time!
- See color proofs of every job before they hit the press!
- Save labor, ink, stock!
- Get closer register!



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Learn why Army Navy Air Force and top American firms now use new amazing CELLULINER!

- **300% greater compressive resilience** *4 times the cushioning protection!*
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- **Absorbent or non-absorbent types —** *both meet Fed. Spec. UU-C-843!*
- **Has very great insulating capacity—** *is chemically neutral, soft, clean!*
- **Weighs far less than creped wadding** *— cuts freight costs appreciably!*

CELLULINER costs you no more per square foot than creped wadding, yet its superiorities mean definite savings in your pocket! Send for full facts today!

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Plants and people

vapor-phase corrosion-inhibitor paper, products of the **Nox-Rust Chemical Corp.**, Chicago.

Doris Bond, former gift wrapping specialist with Nieman-Marcus, is now store service director for **Modern Packagings**, Dallas, Tex., producers of the Martha Page Gift Wrap Service. Included in the operation of Miss Bond's department will be the setting-up of special gift wrapping facilities for the Martha Page group of department store franchise holders.

National Container Corp., New York, has appointed **James J. Glynn** as general sales manager of the company's plant in Aurora, Ind. Mr. Glynn will headquarter in the Parkway Bldg., 2802 N. Delaware St., Indianapolis. In the St. Louis area, **William J. Gass, Jr.**, has been appointed sales manager.

James N. Grove has been appointed to the New York office of the **Plaskon Div.**, **Libbey-Owens-Ford Glass Co.**, Toledo, Ohio. Mr. Grove will be sales representative for both Plaskon polyester resins and L. O. F. fibre glass to the plastics industry. **George L. Smead** has been named to manage the division's sales of polyester resins and fibre glass to the reinforced plastics industry.

Robert Gair Co., Inc., New York, manufacturer of folding cartons, paperboard and shipping containers, has announced that **John H. Macleod** has joined the container operations division as special representative. Mr. Macleod was formerly with the Hinde & Dauch Paper Co., and also served as a consultant to the container division of the National Production Authority.

J. H. Macleod

Gair has moved its suit and retail box manufacturing department to its Thames River plant at New London, Conn., to serve the retail garment industry in the metropolitan New York area with greater efficiency.

The Sutherland Paper Co., Kalamazoo, Mich., producer of folding cartons and paper specialties, has appointed two field men to its sales force. **M. B. Carraway** will cover the Northwestern part of Michigan and **Joseph A. Suarez, Jr.**, will cover Connecticut and Rhode Island, plus certain surrounding counties.

The American Can Co., New York, has announced that its newest fibre milk-container manufacturing unit has been set in operation at Portland, Ore. The new unit, with an annual capacity of 200 million containers, will supply millions of fibre milk containers to dairies in the Northwest area.

American Can has announced a plan to sell paper milk containers to dairy distributors. The plan is being undertaken on a limited basis to take care of small dairies which customarily obtain most of their dairy supplies through a distributor.

Stone Container Corp., Chicago, has appointed **Hervey E. Parker, III**, sales manager of the company's corrugated box division in Mansfield, Ohio. Mr. Parker joined Stone Container's Chicago division in 1944 and has had considerable experience in engineering boxes to meet the special requirements of different manufactured products.

H. E. Parker, III

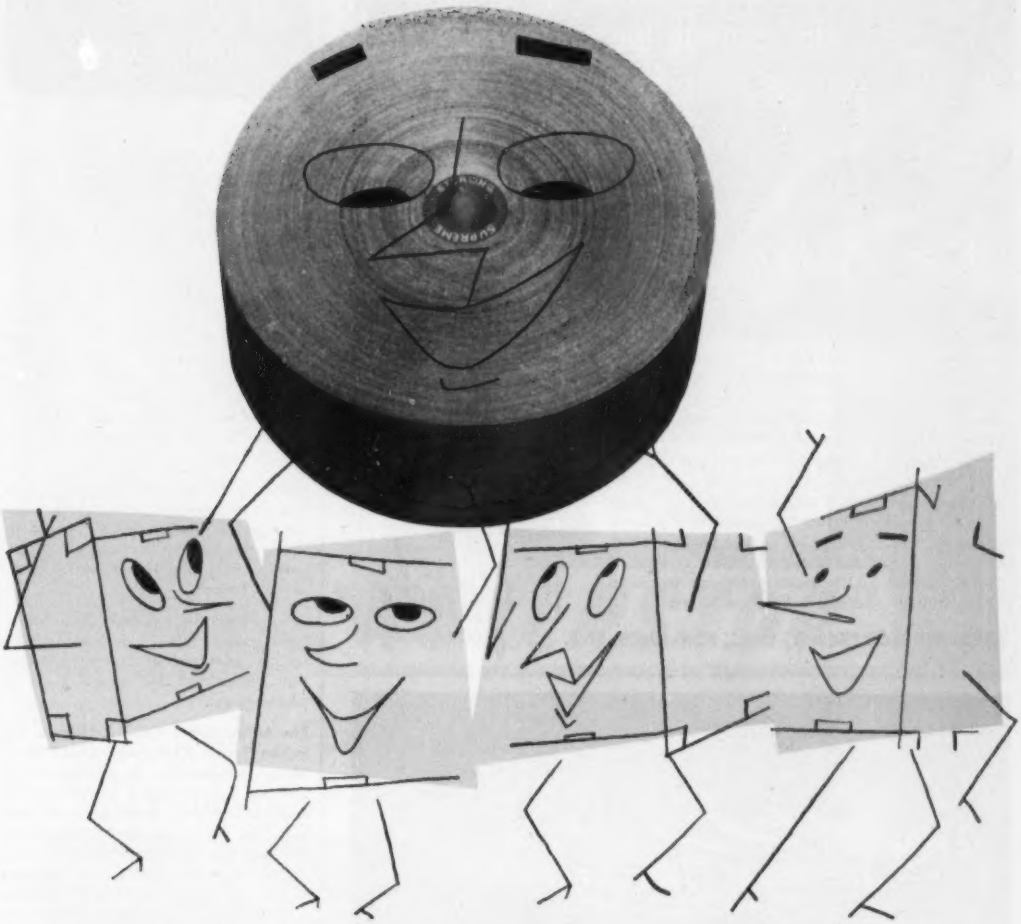
Krafco Container Corp., Dallas, Tex., has named **George W. Scrimshaw** as board chairman. He will retain his duties as president. Other new officers are: **W. B. Scott**, vice president and general manager; **John C. Hunt, Jr.**, vice president in charge of sales; **C. W. Dodgen, Jr.**, vice president in charge of finance; **H. G. McDonald** board member and treasurer. **C. A. Pendergast** has been appointed general sales manager. **G. Richard Ware** is assistant plant superintendent at West Monroe, La. **M. J. Charlton** is assistant to the vice president in charge of production.

Krafco has purchased **Kraftex Enterprises, Ltd.**, Dallas, distributor of corrugated shipping containers.

The Harris-Seybold Co., Cleveland, Ohio, has elected **Ren R. Perry** as vice president in charge of sales, **W. Ray Spiller** as vice president in charge of engineering and research and **George C. Houck** as vice president for operations.

Richard Hanson, manager of the Kansas City district office of **Kaiser Aluminum & Chemical Sales, Inc.**, has been named assistant to **John E. Menz**, general sales manager, in the company's Chicago general sales office. **Wallace A. Davidson** has been appointed manager of the Kansas City office and **Donald F. Sheridan** has become branch representative at Wichita, Kan.

The Latchford Marble Glass Co., Los Angeles, Calif. has formed two subsidiary sales organizations: **Latchford Mar-**



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Ask your paper merchant for Sterling Supreme next time you need a finer gummed tape.

Sterling Supreme Super-Standard Gummed Tape is a shipper's hero from coast to coast.

There's good reason why Sterling Supreme Super Standard Gummed Tape is a hero. This outstanding combination of kraft paper and a *better* gumming, saves many thousands of cartons from costly damage every day. Properly applied Sterling Supreme Super-Standard Gummed Tape *holds permanently*, does it's intended job perfectly.

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This is the Gottscho MARKOCODER—the fully automatic packaging-line **printing** machine that enables you to use a common package for **dozens** of different products. The MARKOCODER prints name, number, other product identification on one or more blank panels of partially-printed containers . . . cartons, boxes, cans, canisters, jars, etc. . . . as part of the packaging operation. It saves thousands of dollars by slashing package inventories . . . preventing downtime on the line . . . cutting losses from package obsolescence . . . simplifying inventory control . . . reducing labor costs. Find out how much it can save your company—write for descriptive brochure today.

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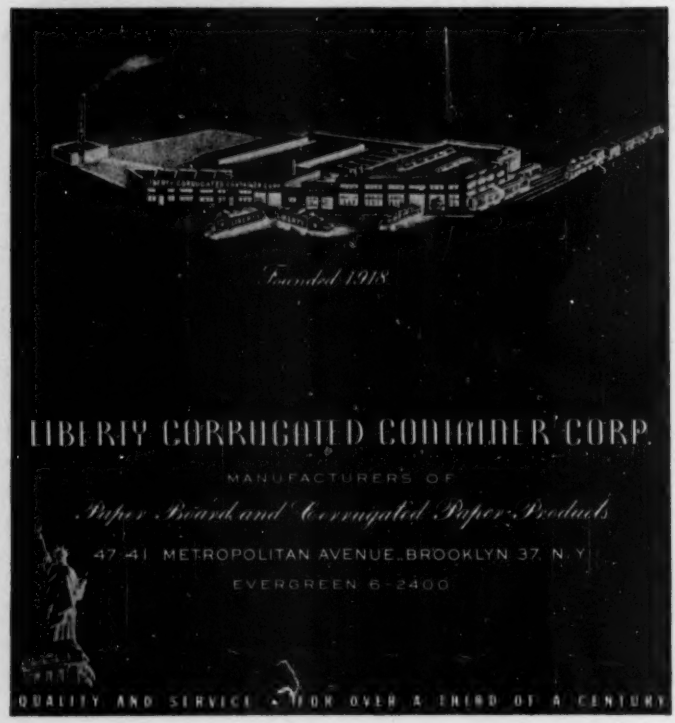
Gottscho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MANUFACTURERS OF
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QUALITY AND SERVICE . . . FOR OVER A THIRD OF A CENTURY

Plants and people

ble Package & Supply Co., Los Angeles, and **Latchford Marble Container & Supply Co.**, San Francisco and Fresno. Officers of the new Los Angeles corporation are: **John B. McCandless**, president; **William Simkins**, executive vice president. Officers of the San Francisco-Fresno firm are: Mr. Simkins, president; Mr. McCandless, vice president; **W. B. Marble**, secretary; **E. E. Balling**, treasurer. **Frank A. Toso** is in charge of sales in the San Francisco territory, while **Clarence Coulter** will hold a similar position in Fresno. **Kenneth Hoffman** and **Ralph D. Forsman** will handle sales in the San Francisco office.

Arthur D. Little, Inc., consulting industrial research and engineering firm, Cambridge, Mass., has opened a midwest office in the Railway Exchange Bldg., St. Louis 1, Mo. **John R. Kirkpatrick** heads the new branch.

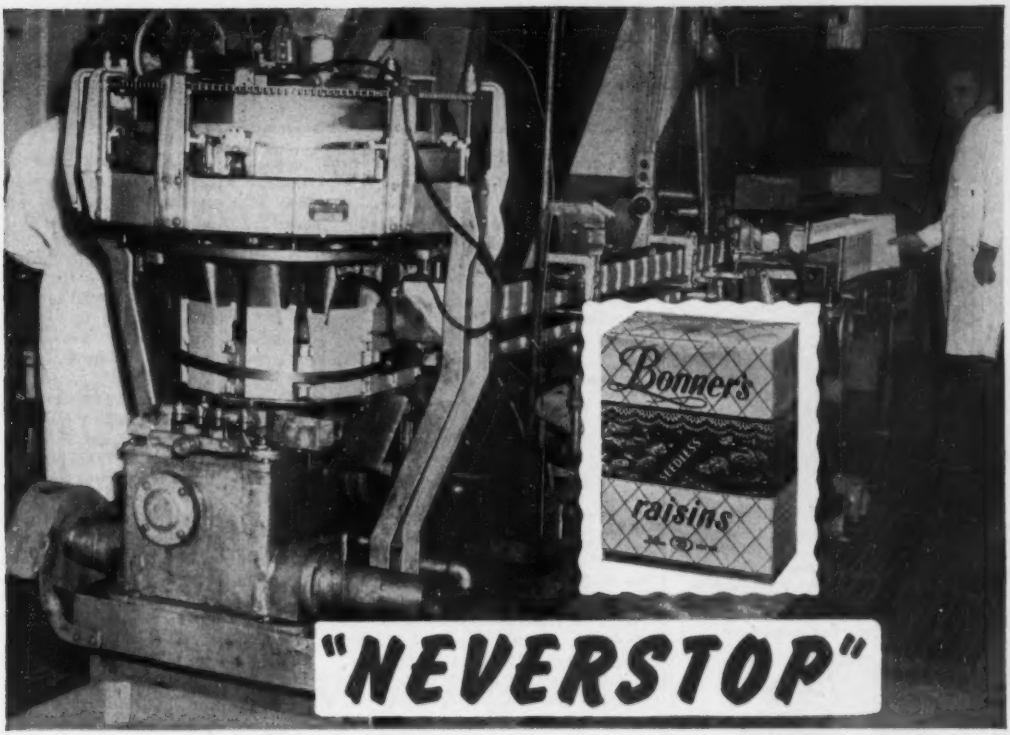
Photoswitch, Inc., Cambridge, Mass., has appointed **John B. Sullivan** as Eastern sales manager. Mr. Sullivan has been with Photoswitch for several years as sales engineer.

The Arthur Colton Co., subsidiary of the **Snyder Tool & Engineering Co.**, Detroit, Mich., manufacturer of pharmaceutical, tableting and packaging equipment, has appointed **Arthur J. Rocke** as export manager. Mr. Rocke, president of the **Rocke International Corp.**, New York, has placed the corporation's foreign branches at the disposal of the Colton company. The Rocke firm's branches are located in Argentina, Belgium, Brazil, Costa Rica, Cuba, England, France, Italy, Mexico and Venezuela and has agents in many other countries.

Colton has announced the establishment of a new plant in Mancelona, Mich., to replace the plant previously operated in Paducah, Ky. The plant will be devoted exclusively to the manufacture and servicing of punches and dies for the food, confectionery, pharmaceutical, plastics and munitions industries.

Louis C. Ball has been appointed acting region manager of the Houston, Tex., operations of the **Rheem Mfg. Co.**, New York. **Parr Krumb** has been named works manager of the Houston plant.

Acme Steel Co., Chicago, has announced five key changes in its Western area sales staff. **Howard H. Gamble** has been made special representative of the Los Angeles District for development work in con-



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NEVERSTOP PACKAGES

Salt • Detergents • Soap Granules • Cereals • Rice Cracker Meal • Powdered or Non-free Flowing Products.

Now . . . the S & S NEVERSTOP carton filling and sealing machine is packaging raisins in 15 ounce cartons. The range of this highly efficient, completely automatic high-speed packaging unit is up to 120 cartons per minute. Any necessary adjustments for control of amount of product are easily made by a turn of a hand wheel. The NEVERSTOP automatically feeds the cartons from a supply, bottom seals them, fills through adjustable volumetric measuring cups and top seals them in a continuous motion. For complete information, specifications, etc., write Stokes and Smith.

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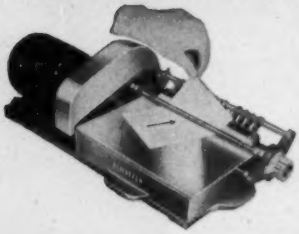

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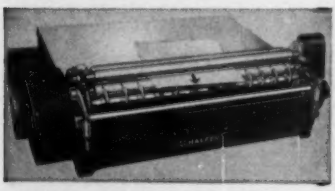
SAVE 35% LABOR. Speedy machine-gluing instead of slow brush-daubing. Round, square and die-cut labels glued. No adjustment except for glue coating. Ideal for short runs and production.

SCHAEFER EDGE GLUER-CEMENTER coats edges of paper, cloth, leather and cardboard with glue or latex. 3", 8", and 11" wide rollers.



SCHAEFER GLUER-CEMENTER. Heavy-duty construction. Sizes 16" to 52" wide, for coating cardboard, leather, cork, masonite, foam rubber, fibre, leatherette, canvas & paper.

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Plants and people

tainer reinforcement and carload bracing. Replacing Mr. Gamble as sales representative in Los Angeles is **Ray D. Villas. E. J. McGraw** and **Arthur B. Hall** have been transferred to San Francisco. **J. P. Brehm** has replaced Mr. Hall at South Central California.

Continental Can Co., New York, has appointed two new district sales managers: **John S. Devlin** in the Houston district and **Bruce R. Petersen** in the Milwaukee district. Mr. Devlin will direct sales activities in both Texas and New Mexico.

J. S. Devlin (left) and B. R. Petersen

After 30 consecutive years of service, **Marion W. Coulter** has retired as sales representative of Continental. In recognition of his service record company officials presented him with a diamond ring and pin at a farewell dinner.

Elmer J. Stoltz has been appointed sales representative for the Cleveland area of **Rhinelander Paper Co.**, Rhinelander, Wis., manufacturers of glassine and greaseproof papers.

Bruce B. Sutton has been appointed sales director of the Container Div. of **Reish Products, Inc.**, South Bend, Ind. The firm's Container Div. fabricates special aluminum foil packages for consumer and industrial uses.

Announcement has been made of the appointment of **D. H. Kennedy** as Western sales manager of the **International Paper Co.**'s Southern Kraft Division. Mr. Kennedy, who joined International Paper in 1936, succeeds the late Raymond Bee. Also announced is the appointment of **J. D. Dooley** as assistant Western sales manager for kraft linerboard sales. **N. P. Sparkman** has been named as assistant Western sales manager for kraft paper and bag sales.

Wilbur H. Turner, representative for the **Heekin Can Co.**, Cincinnati, for more than 25 years in the states of Illinois, Indiana, Iowa, Missouri and Wisconsin, has retired from the firm. **John H. Dettenwanger** has replaced Mr. Turner. Mr. Dettenwanger formerly covered Indiana, Michigan and Ohio. **C. H. Meadows** has replaced Mr. Dettenwanger in the Indiana and Michigan territories, with headquarters in Kokomo, Ind. **Robert L. Gastenveld** has been named a general-line sales representative in Ohio and parts of Pennsylvania and West Virginia.

The Sonoco Products Co. of Hartsville, S. C., has acquired the **Gates Paper Co.** of Los Angeles, according to a recent announcement by **James L. Coker,** Sonoco's president. **E. H. Southwell,** former president of Gates Paper Co., will remain as Sonoco's manager for the West Coast plant and will also have charge of sales for the Western Division. The Gates company, established in 1928, produces spiral paper tubes, paper cans, fibre cans with metal ends and other paper products. Under Sonoco's management, all these products will continue to be manufactured and, in addition, parallel and convolute tubes will also be produced. Later, new equipment is expected to be installed to manufacture the same type of products presently being produced in Sonoco's other plants. The new Western facility is the sixth Sonoco plant in the United States. Sonoco also has plants in Canada, Mexico, England and Australia, and is one of the largest manufacturers of paper textile carriers and paper specialties.

The appointment of **Lowell E. Browne** of Alamo, Calif., as sales representative for the Northern California area of the **National Container Corp.**, New York, makers of corrugated shipping containers, has been announced. Working through National's Oakland Divison in California, Mr. Browne will serve as a specialist in the canning and food packaging fields in the territory of San Joaquin Valley and surrounding districts.

John M. Hayward has been appointed assistant general manager of the **Kalamazoo Label Co.**, Kalamazoo, Mich. Mr. Hayward is the son of the late Ralph A. Hayward, for many years president of the Kalamazoo Vegetable Parchment Co. Prior to joining the Kalamazoo Label organization, John Hayward was engaged in planning and production control at Kalamazoo Vegetable Parchment Co., Parchment, Mich.

Dr. Wesley S. Coe has been appointed as assistant factory manager of the Naugatuck, Conn., plant of Naugatuck Chemical Div., **United States Rubber Co.**, New York. **Herbert Scullin** succeeds Dr. Coe as chemical production superintendent.

R. S. Milton has been appointed purchasing agent of the **Filtrol Corp.**, Los An-

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A scythe, like scissors, is a good cutter for the kind of job it must do. *Your* cutting job, however, must meet modern production demands for speed, accuracy and economy . . . and, for *you* the most modern, efficient and productive answer is a Beck Sheeter. It cuts any material from rolls any time, any quantity. Sheets to fit your exact size specifications. Eliminates cutting charges. Many other advantages, too. Get the facts today.

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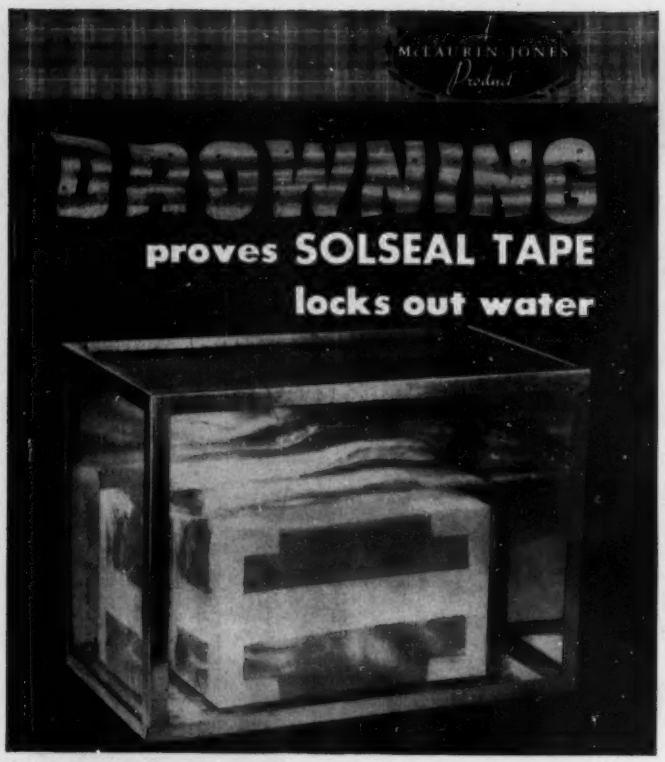
406 N. 13th Street **BECK** **Philadelphia 8, Pa.**



Drowned for nine weeks . . . tortured before and after submersion . . . and Solseal Waterproof Tape held a watertight seal. When the tape was finally pulled away, the carton fibres came with it. Proof positive Solseal Waterproof Tape becomes part of a waterproof carton!

Here's a tape that not only seals your merchandise against dust, dirt and gases, but also against water and humidity in extremes of heat or cold.

The secret of Solseal's waterproof bond results from the combination of the special material in the Solseal Tape with those of the Solseal Solvent. This forms a waterproof bond after it has been applied to the carton. It is non-flammable and non-volatile. The solvent can be put in your regular dispensers. You then apply Solseal Tape as you would any other.

Think of your product. Think of your customer's good will. Protect both with the miracle of modern packaging . . . Solseal Waterproof Tape!

Super-strong Glaskraft Solseal Tape

is embedded with glass fibres. This boosts tensile strength, gives you a tape that can take more than the carton it seals.

Both 30/30/30 SOLSEAL and GLASKRAFT SOLSEAL meet requirements of joint Army-Navy Spec. JAN.—P—128 and U.S. Bureau of Standards UU-T-116.

McLAURIN-JONES CO.

BROOKFIELD, MASS.

Makers of famous Tanglefoot and Blue Star Sealing Tapes, Glaskraft Strapping Tape, Ideal Stay Tape and a wide range of corrugated box tapes.
Offices in New York, Chicago, Cincinnati, Los Angeles.
Mills located at Brookfield and Ware, Mass., Grand Rapids, Michigan and Homer, La.

Plants and people

geles, producers of desiccants and other chemically treated materials.

James B. Crassweller has been appointed advertising manager of the **Weber Addressing Machine Co.**, Mt. Prospect, Ill., manufacturers of addressing machines and marking devices.

Samuel Gilbert Gorsline, 67, secretary of the **Canning Machinery & Supplies Assn.** died on Aug. 22nd following an operation. Mr. Gorsline, a colorful figure in the food-canning industry, was elected secretary of the Assn. in 1930, a post he had held ever since. He became known to every segment of the food business and directed arrangements for the food-machinery exhibits which have been held each year.

S. G. Gorsline

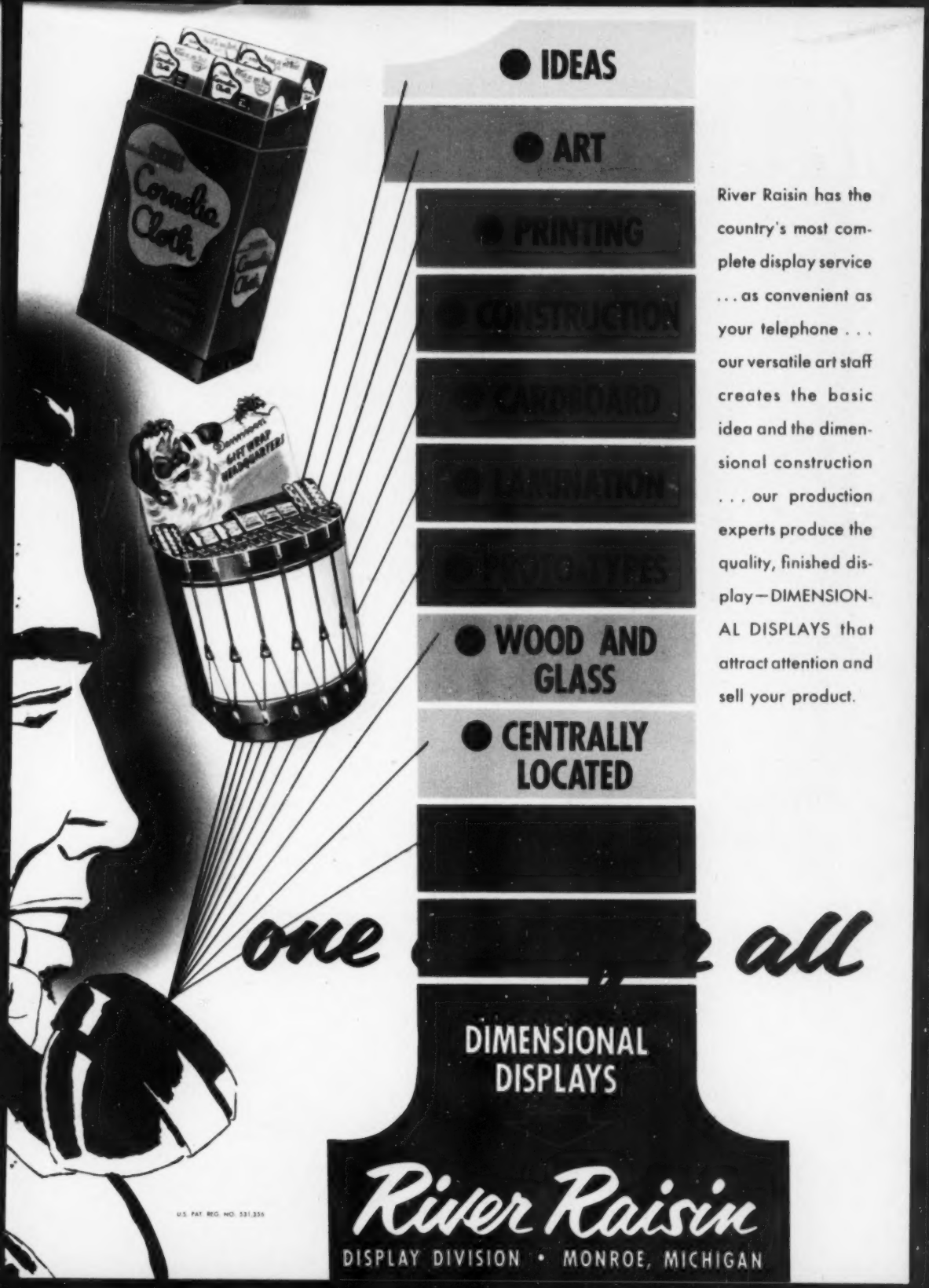
Raymond E. Stoltz, general sales manager of the **M. D. Knowlton Co.** of Rochester, N. Y., manufacturer of paper packaging machinery, died on Aug. 7th at Roslyn Park Hospital, Roslyn, L. I. Mr. Stoltz had been with the company for 44 years, serving as general sales manager since 1949. In addition to his duties at Knowlton, Mr. Stoltz had been president of the National Paper Box Supplies Assn. for the past two years.

R. E. Stoltz

Benjamin Elsas, chairman of the executive committee of the **Fulton Bag & Cotton Mills**, Atlanta, Ga., died on Aug. 26th after a five-month illness. Mr. Elsas, formerly president of the company, had also served as chairman of the board before assuming duties as chairman of the executive committee.

Newell Neidlinger, a vice president of **Peerless Tube Co.**, Bloomfield, N. J., died at his home on Aug. 11th at the age of 52. Mr. Neidlinger was widely known in the collapsible-tube industry.

Harry A. Rabinowitz, treasurer of **J. Rabinowitz & Sons, Inc.**, glass jobbers located in Brooklyn, N. Y., died of a heart ailment while on a business trip in Brussels, Belgium. He was 57 years old. Mr. Rabinowitz was well known in the bottling and glass industry.



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The River Raisin lightweight Background Display can be used by Manufacturers, Dealers and Salesmen for Fairs, Industry Shows, Conventions, Hotel Shows and Factory Showrooms. So light and easy to erect that one man can install it complete in 15 minutes. (Total shipping weight 67 lbs.) The cost is less than shipping charges for conventional exhibit materials. Expensive controls, refurbishing charges and other details that plague exhibit managers are eliminated.

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RIVER RAISIN PAPER COMPANY, Display Division, has had many requests for lightweight backgrounds from both large and small manufacturers of many classifications. This general need for an attractive, sturdy, low-cost background display has been met by our creative department. You can buy as many, or as few, of these lightweight show pieces as you require. Now, you can get the most from your display Sales Promotions at a minimum of cost.

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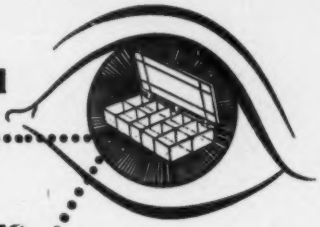
does your package have

eye-appeal

buy-appeal?



Customers reach for the product in the eye-catching package. A sparkling, new GILBERT PLASTIC package specially designed for your particular needs will make them reach for yours!

GILBERT PLASTICS is equipped to handle all your packaging problems from the planning and designing stage to the finished product. Give your product *eye-appeal* to insure its *buy-appeal*. Contact GILBERT PLASTICS *today!*

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MOISTURE-PROOF
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Write, Wire or Phone Your Orders

We sell a complete line of cloth backed, paper backed and foil backed barrier materials to meet requirements of Army, Navy and Air Force packaging; also, gummed and pressure sensitive tapes, packing list envelopes and protectors.

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MIL-C-6056	JAN-P-101	JAN-B-121
UU-P-271a	JAN-P-115	JAN-B-148
100-14-A	JAN-P-128	JAN-P-108
19-B-13	JAN-P-131	JAN-P-116
MIL-B-131A	JAN-P-140	JAN-P-117
MIL-C-10547	JAN-P-658	JAN-P-125
MIL-E-6060	AN-B-20	JAN-P-127
MIL-B-3149	AN-C-67b	JAN-P-130
JAN-P-100	AN-E-1b	FS-100-N5
	AN-T-12a	

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If it flows, EVENFLO can apply it better!

The answer to your problems involving the application of fluids. Evenflo engraved rolls apply your ink or coatings in the correct amount, continuously and automatically. No time-consuming adjustments are required and materials are conserved because of fewer rejects due to faulty application. Evenflo Engraved Rolls can improve your presswork and step up the efficiency of your coating operations by assuring uniform coverage.

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The new Evenflo Data Sheet is a complete guide to the use of engraved applicator rolls. Fully illustrated and includes tables of sizes. Aniline printers, paper coaters and specialty makers will find it helpful. Call or write Pamarco for your Evenflo Guide, today!

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For your information

The annual exposition this month of the **Society of Industrial Packaging & Materials Handling Engineers,** together with the technical short course, sponsored jointly by the University of Illinois and SIPMHE and the seventh annual **National Protective Packaging & Materials Handling Competition,** are expected to break all previous records, according to **R. C. Cragg,** general chairman of the exposition, and **A. S. Roberts,** general chairman of the competition. The exposition and competition will be held at the Chicago Coliseum, Oct. 14-16, and the short course will start one day earlier. Over-all theme of the triple event is "Making Profits through Packaging and Materials Handling." The short-course curriculum will include such topics as "Marketing Aspects and Techniques," "The Integrated Packaging, Materials Handling, Transportation and Distribution Story of Lever Bros. Co.," "The Product—the Package—the Color and Design," "Current Trends in Materials Handling and Packaging Cost Determination" and "Some Hotpoint Techniques in Packaging and Materials Handling." The complete panels of judges for the competition have been named. Following is a list of the chairmen for each of the competition's seven divisions: Group 1, Corrugated or Solid Fibre Boxes—**F. R. Campbell** of Armstrong Cork Co.; Group 2, Nailed Wood Boxes and Crates—**E. J. Dahill** of the Assn. of American Railroads; Group 3, Wirebound Boxes and Crates—**E. H. Stivers** of Package Research Laboratory; Group 4, Cleated Panel Boxes—**P. H. Paulsen** of Wm. H. McGee & Co., Inc.; Group 5, General—**J. W. Kraus** of Thompson Products, Inc.; Group 6, Export Packages—**H. J. Benzie** of General Electric Co.; Group 7, Materials Handling—**R. L. Franing** of International Harvester Co.

The Canadian Package Design Committee of the **Packaging Assn. of Canada** is sponsoring two national competitions—one in the consumer-package field and the other in the industrial-container field. Both competitions are open to all Canadian manufacturers, whether or not they are members of the association. They will lead to the first all-Canadian awards for design and production of packages and containers. Closing date for the two competitions is Oct. 10. All entries will be displayed at the **First Canadian National Packaging Exposition** in Toronto's Coliseum, to be held Oct. 21-23. Judging will precede the Exposition opening and award winners will be on special display at that time. There are 15 product classifications in the consumer-package competition and eight container classifications in the industry-container design competition. Awards will consist of certificates of award and honorable mentions in each classification. They will be presented to the manufacturers of the packaged products, with credits to packaging suppliers and designers. Gold, silver and bronze plaques will be awarded to winners.

Daniel M. Le Hockey, for the past four years director of public relations for the **Folding Paper Box Assn. of America,** has been named Midwest group secretary of the association. He succeeds **John T. Curry,** who has resigned. **John C. Newell, Jr.,** assistant public relations director for the past two years, has been advanced to director of public relations for the association.

The 16-mm., full-color sound film being made available to folding-carton manufacturers by the FPBAA, entitled **"The Magic Box,"** has had more than 5,800 showings to almost 700,000 people, according to an association report. A descriptive brochure of the film may be obtained from the association's offices, 337 W. Madison St., Chicago 6, Ill.

The Second Netherlands Packaging Show will be held at the R. A. I. Buildings in Amsterdam, Holland, Jan. 8-16, 1953. Success of the First Netherlands Packaging Show, held in 1951, prompted the packaging industry to sponsor a similar exhibition for 1953. All branches of the packaging industry will be represented, including packaging machinery; materials handling; wooden, textile, paperboard, metal and glass containers; transparent packaging materials; adhesives; inks and varnishes; printing machinery; closures, etc.

E. H. MacNiece, director of quality control for Johnson & Johnson, has been made chairman of the new Industry-University Committee for Quality Control at **Rutgers University.** The committee seeks to increase the scope and nature of quality-control programs at the State University and to expand its values for New Jersey industry.

Sixty-six separate sessions on maintenance problems have been scheduled for the forthcoming **Plant Maintenance Conference,** it has been announced by **Clapp & Poliak, Inc.,** New York, which conducts the conference. The Conference, to be held at the Public Auditorium, Cleveland, Jan. 19-22, inclusive, will take place concurrently with the **Plant Maintenance Show.** Maintenance problems in 11 industries will be discussed at separate conferences; industries included are automotive, chemical, food, foundry, paper, oil, printing, rubber, steel, textiles and electrical. Separate conferences also will be held for problems of small, medium and large plants. The exposition is expected to be almost 75% larger than this year's and will cover an area of 110,000 sq. ft. It will have almost four times the number of exhibiting companies of the 1950 show. Advance registration cards and hotel information may be obtained from Clapp & Poliak, Inc., 341 Madison Ave., New York 17, N. Y.

Edwin S. Friendly, vice president of the *New York World-Telegram and Sun,* has been named chairman of the planning committee for **Brand Names Day-1953,** to be April 15, at the Waldrof-Astoria Hotel in New York. This will be the eighth conference keyed to brand and advertising themes to be sponsored by

What's doing

Oct. 3-7—**American Meat Institute,** annual convention, Palmer House, Chicago.

Oct. 4-6—**National Poultry, Butter & Egg Assn.,** annual convention, Hotel Sherman, Chicago.

Oct. 5-8—**Washington Gift Show,** Willard, Washington, D. C.

Oct. 6-10—**National Hardware Show,** New York.

Oct. 12-14—**Small Brewers Assn.,** Chicago, Ill.

Oct. 12-15—**Folding Paper Box Assn. of America,** executive meeting, Greenbrier, White Sulphur Springs, W. Va.

Oct. 12-16—**Printing Industry of America, Inc.,** annual convention, Chase Hotel, St. Louis, Mo.

Oct. 14-16—**Seventh Annual Industrial Packaging and Materials Handling Exposition,** Coliseum, Chicago.

Oct. 18-22—**American Bakers Assn.,** Chicago.

Oct. 19-21—**Conveyor Equipment Mfrs. Assn.,** Greenbrier, White Sulphur Springs, W. Va.

Oct. 20-22—**Packaging Institute,** 14th Annual Forum, Commodore Hotel, New York.

Oct. 22-25—**National Bakery Supplies Assn.,** annual convention, Drake Hotel, Chicago.

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Through . . . YOU . . . PRECISION has grown to be the world's largest producer of aerosol valves. Although still in its infancy, the aerosol field has made tremendous strides during the past few years. We have, however, because of this rapid growth, been unable to satisfy *all* your aerosol valve requirements. We thank you for your patience and understanding, but more so, for your continued reliance on the quality of a PRECISION valve.

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PRODUCE EYE-APPEALING PACKAGES AT AMAZING SPEED OF 3 *UNITS PER SECOND!*

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Write for fully illustrated brochure.

For your information

the **Brand Names Foundation, Inc.**, New York, and will coincide with the annual meeting of the Foundation and the election of new officers and directors.

An instructive, new 16-mm. sound motion picture in color entitled **"From Pine to Paper"** dramatically tells the story of the manufacture of kraft paper and its conversion into bags, wrapping paper, gummed sealing tape, etc. The film was made by **S. W. Franklin,** merchandising director of **Hudson Pulp & Paper Corp.**, at Hudson's operation in Palatka, Fla. It gives the salesman a complete picture of what goes on behind the scenes in the manufacture of kraft, giving him product knowledge not often available. The film is basically documentary rather than promotional. Running time is 41 minutes. Companies may reserve the film by writing to Hudson's Film Lending Library, 505 Park Ave., New York 22, N. Y.

A new Spanish-language publication designed to help Latin-American manufacturers of retail-type goods solve their packaging problems has been published by **E. I. du Pont de Nemours & Co., Inc.** Entitled **"Envolturas y Presentacion al Dia,"** this new quarterly is the export house organ of DuPont's Film Department. It contains background information on DuPont transparent wrappings and other cellulose products, a packaging check-list against which manufacturers may gauge their current programs and a special article on bakeries. Future issues will feature articles on packaging in other specific industries. A free subscription is available to businessmen who will write on their business stationery to DuPont's Film Department, Export Sales, Empire State Bldg., New York 1, N. Y.

Michigan State College has announced the establishment of a four-year course in packaging technology designed to train men for positions as packaging specialists. The course will be administered by the Department of Forest Products, but the actual course content of the major will include many engineering and business administration subjects as well as specialized studies in packing, packaging and carloading. Information on the course may be had from the Department of Forest Products, Michigan State College, East Lansing, Mich.

Users of labels will be interested in a new booklet entitled **"Labels,"** published recently by the **Label Manufacturers National Assn., Inc.** It is designed to tell the history and origin of labels, the im-

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That's right, Mr. Food Processor . . . every H-A food container is planned to appeal to both dealer and consumer.

Dealers like their easy handling and shelf-preservation that mean sales.

Housewives like them for their visual inventory and their ease of storage and protection.

No wonder these efficient jars get the packers' vote!

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Salute to National Wine Week October 11th—18th

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In stock ready for immediate shipment we have twenty-nine different Christmas designs. This is the most complete assortment available. It ranges from inexpensive but gay designs in one or more colors to rich metallics.

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Designed to handle bagged products with a minimum of effort at a maximum speed. Simple adjustments for height . . . tilting forward or backward enables operator to set machine at easiest position. Stainless steel trough with capacity of 200 bags. Adjustable to bag sizes. Blower keeps bag clean and free from foreign matter.

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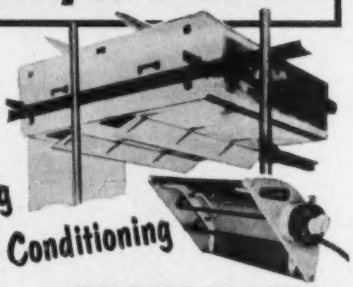

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For your information

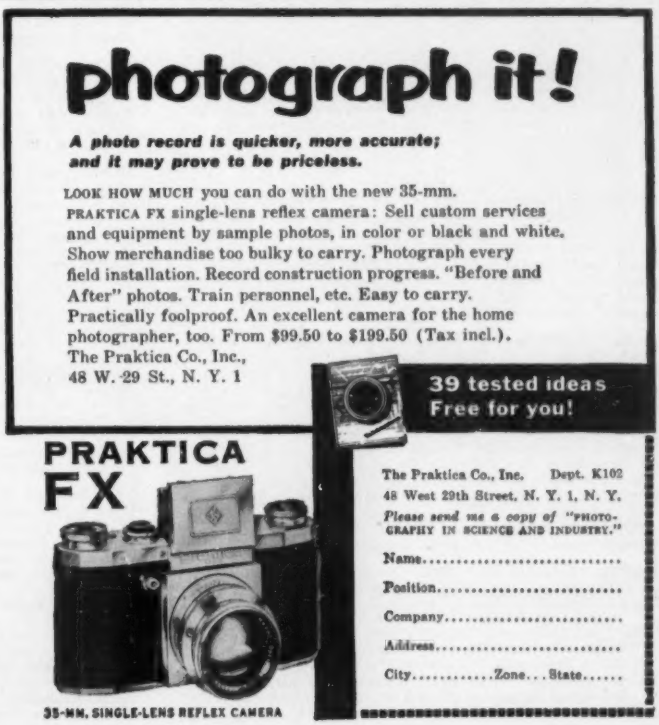
portance of effective label design and the story of the manufacture of labels. Six original labels designed by members of the association are illustrated in full color. The booklets are distributed to association members and copies are available to buyers of labels from suppliers who are members of the association.

The Third Annual Lithographic Awards Competition and Exhibit for lithographed material and advertising matter produced in 1952 will be held in April in New York City, according to the **Awards Competition Committee** of the **Lithographers National Assn.** About 40 different classifications of material are judged, with awards and honorable mentions going to winners on a basis of lithographic quality, design and functional purpose. Entries can be made by either the buyer or any person or organization connected with the design of the piece, or by the producer, in which case the organization does not necessarily have to be a member of the association.

The Stone Container Corp. has published a new 12-page booklet entitled **"Corrugations,"** which describes the role of corrugated paperboard boxes in modern merchandising. Copies are available free of charge from Stone Container Corp., 4200 W. 42nd Place, Chicago 32, Ill.

The American Management Assn., New York, has appointed **Joseph M. Trickett** to the newly created position of associate director of the group's management education study. Mr. Trickett resigned as dean of the School of Management at Golden Gate College in San Francisco to accept the A.M.A. assignment.

A new coating laboratory completely equipped for trial production of commercially equivalent coated products in pilot-plant scale is now available at **Dilts Machine Works,** division of **Black-Clawson Co.** The laboratory facilities are already in use by paper, fabric and plastics converters for tests with a wide range of coating materials on paper, foil, film, fabric and other web materials. The coating laboratory is under the supervision of **George Nicholson,** director of laboratories of Black-Clawson, and is operated by a technical staff including **E. G. Paxton,** coating specialist and chemical engineer. Inquiries regarding use and scheduling of the Dilts laboratory should be addressed to **R. J. Jacobs,** manager of sales and engineering, Dilts Machine Works, Fulton, N. Y.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U. S. patents digest

This digest includes each month the more important patents of interest to those who are concerned with packaging materials. Copies of patents are available from the U. S. Patent Office, Washington, at 25 cents each in currency, money order or certified check; postage stamps are not accepted.

Edited by H. A. Levey

Carton For Handled Tools, C. S. Lehman (to The Fairfield Paper & Container Co., Baltimore, Ohio). U. S. 2,603,350, July 15. A carton for packaging handled tools having a handle and a head substantially at right angles thereto comprising a handle-receiving box section and a head-receiving box section, one end of the handle-receiving section being telescoped with the head-receiving section and being substantially at right angles thereto.

Package Sealing Device, C. Miller, P. L. Snyder and R. H. Swaisgood (to Consumer-Pak Machine Co., Pomona, Calif.). U. S. 2,603,376, July 15. In apparatus for securing draw-string bags: a conveyor adapted to move said bags along a predetermined path, said conveyor including means to hold the draw-strings of said bag taut whereby to close the opening thereof.

Filling Machine Control Mechanism, P. E. Fischer and M. B. Sturdevant (to General Mills, Inc., a corporation of Delaware). U. S. 2,603, 398, July 15. A filling machine comprising a base, a container support and a filling head mounted on the base for relative movement between a loading position and a filling position.

Apparatus For Bottling Carbonated Beverages, J. B. Vance (to Crown Cork & Seal Co., Inc., Baltimore, Md.). U. S. 2,603,399, July 15. In a rotary machine for bottling carbonated water embodying a tank for carbonated water under pressure, a rotating frame, a plurality of rotary filling valves connected to the bottom of the tank and to pressure at the top thereof, each adapted to receive a bottle to be filled.

Container End Closure, J. A. Hollinshead (to Consolidated Paper Co., Monroe, Mich.). U. S. 2,603,400, July 15. An open-ended fibreboard drum and closure formed thereby by folding inwardly a portion of the container wall adjacent said opening, said portion being defined by a peripheral fold line, upper edge of said drum defining said opening being scalloped to form a series of lobes.

Shipping Container, H. H. Strauss (to Gaylord Container Corp., St. Louis, Mo.). U. S. 2,603,401 and 2,603,402, July 15. A shipping container comprising a tubular body having a plurality of connected together side-wall panels, an extension of each panel constituting a similar hollow ledge section polygonal in cross section consisting of connected-together panels with one panel thereof folded in face-contacting relation to the body panel of which it is an extension.

Corner Construction For Marginally Flanged Paperboard Container Covers, W. C. George (to Gaylord Container Corp., St. Louis, Mo.). U. S. 2,603,406, July 15. A cover blank for a container comprising a panel having two angularly disposed corner-forming edges, said panel being scored along one of its margins to provide a flange with a free side marginal flap.

Handled Container and Method Of Manufacure, J. D. Crary (to Paper Strap, Inc., Portland, Ore.). U. S. 2,603,407, July 15. The combination comprising a paper bag, a strap defining a handle for said bag, said strap being doubled endwise upon itself substantially at the center, the end portions of said doubled strap being preformed by folding in the same direction at right angles to the intermediate portion of said strap.

Feeding Apparatus, R. S. Hood (to Monsanto Chemical Co., St. Louis, Mo.). U. S. 2,604,246, July 22. A valve for controlling the flow of finely divided solids.

Paper-Box Folding and Corner-Locking Machine, F. A. Bellato (to Carando Machine Works, Stockton, Calif.). U. S. 2,604,022, July 22. A mechanism for coupling hook-and-eye connections adjacent the corners of a paper box formed in a machine having an open-throat die and a plunger to progress an initially flat, precut paper box blank through the die to up-fold the sides and ends of the box and to in-turn end tabs of the box ends into outside lapping relation to adjacent portion of said sides.

Screw-Type Article-Conveying Mechanism, J. Hohl and A. F. Trendel (to Owens-Illinois Glass Co., a corporation of Ohio). U. S. 2,604,200, July 22. Article-conveying apparatus comprising a conveyor having a cylindrical body portion formed with a spiral channel extending therealong, means for mounting the conveyor for rotation about its axis, channel having a comparatively low pitch throughout an additional portion of its length.

Nursing Unit, W. D. Teague, G. M. Peltz and M. Immermann (to Shellmar Products Corp., Chicago, Ill.). U. S. 2,604,222, July 22. A nursing unit comprising a flexible disposable receptacle, a ring-like connecting member of rectangular cross section, connecting member being relatively thin and having smooth peripheral surface of substantial depth.

Preformed Bottle Cap, R. H. Horning (to Oswego Falls Corp., Fulton, N. Y.). U. S. 2,604,223, July 22. A bottle cap preformed from a thin sheet of heat-and-pressure-moldable synthetic material comprising a discoidal portion adapted to overlie the top of the bottle.

Expansible Plug Closure, H. H. Armstrong (to The B. F. Goodrich Co., New York, N. Y.). U. S. 2,604,225, July 22. A closure for the mouth of a container, said closure comprising an annular body of resilient material having an axial bore therein and circumferentially extending ribs spaced apart axially on body with a circumferential channel therebetween.

Closure For Flexible Tubes, J. J. Frank (to Hercules Fasteners, Inc., a corporation of New Jersey). U. S. 2,604,228, July 22. A closure for flexible tubes including a flexible tube having a collapsed and pleated part with a hole extending through the pleats from side to side, a flexible sleeve about the pleats having registering holes, a hollow rivet extending through the holes in sleeve and pleats, and having wings extending from one end about the sleeve and fastened beneath the heat of the rivet.

Apparatus For Applying an Overwrap, G. E. Tripp (to The Visking Corp., Chicago, Ill.). U. S. 2,604,244, July 22. An apparatus for applying a tubular wrap which comprises a cylindrical tube in which a flattened tubing closed at one end and constituting the wrap is to be inserted with the closed end leading and the open end turned back on one end of said tube.

Defoamer For Bottling Machines, E. R. Andre (to Ex-Cell-O Corp., Detroit, Mich.). U. S. 2,604,247, July 22. In a defoaming device for removing foam from milk or the like and adapted for attachment to a bottling machine in which the containers are progressively moved into a defoaming station.

Tight Carton, F. D. Bergstein, Cincinnati, Ohio. U. S. 2,604,-252, July 22. A proofed paperboard structure comprising a paperboard carton having enclosing body walls in articulation and end closure flaps, carton being in erected condition with the closure flaps closed across an end thereof, carton being sealed interiorly at closed end by thermoplastic sealing.

Box Or Carton, L. Rosenfield (to Miro Container Co., Inc., Brooklyn, N. Y.). U. S. 2,604,254, July 22. A box member comprising a flat piece of sheet material having an indentation in its periphery and a rim for said piece, said rim having an outside layer with a groove along one edge receiving the periphery of said piece, the rim also having an inside layer folded upon the inner surface of the outside layer and secured thereto.

Golf-Club Box, C. B. Welshenback (to The Hinde & Dauch Paper Co., Sandusky, Ohio). U. S. 2,604,255, July 22. A one-piece, knock-down box for golf clubs comprising an elongated rectangular bottom and side and end walls, each side wall comprising a body section hinged to the bottom and a liner section hinged to the body section and lying against its inner face.

Protective Device, E. B. Whitehead (to Atlantic Carton Corp., Norwich, Conn.). U. S. 2,604,256, July 22. A protective shock-absorbing device for surrounding an object comprising an elongated strip of resilient material having a longitudinal body portion and longitudinal side portions folded over onto the inner side of the body portion along longitudinal fold lines at opposite longitudinal sides of body portion, opposite ends of strip pro-

(Continued on page 180)

MIDGETS SELL BIG!

Continental HALF-SIZE Aerosols get new customers for your liquid and foam products

You tap a whole new market when you offer your liquid or foam-type products in Continental's midget aerosol containers. You get the people who can't use the regular size, those who want to "sample it," and those more concerned with lower first cost than overall economy.

Continental's midget aerosol cans are miniature, half-size editions of their big 12-oz. brothers. They come in the same domed-top (1-inch curl opening) and concave styles. They take the same standard valves. And they perform just as beautifully.

For details and success stories *in your field,* just call the nearest Continental office.

Hold 6-oz. of average product

Domed-top or concave styles

Volume builders for makers of—

Shaving cream, shampoos, hair lacquers and other toiletries

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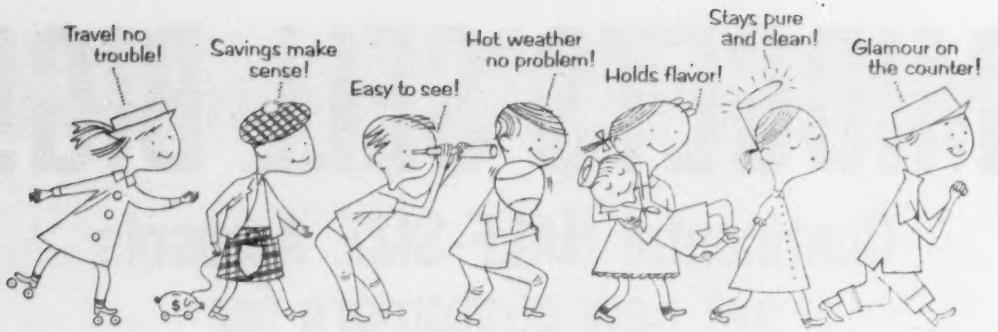
PACIFIC DIVISION: Russ Building, San Francisco 4



Chunky Chocolate in Olin Cellophane is 7 Ways more wonderful

Here's the New Olin Cellophane Overwrap that does the job!

Attractive new Olin Cellophane overwrapped shipping unit displays itself yet saves money.

Goodbye to old-style shipping lid! It masked shelf identity, lessened point-of-sale visibility, gave less product protection yet cost more.

Olin Cellophane keeps packaging costs down— helps sell Chunky Chocolate—7 great ways!

Chunky Chocolate Corporation are first makers of chocolate bars in candy industry to replace old-style shipping lid with new Olin Cellophane overwrap.

1. **Easy to See!** New Olin Cellophane overwrap gives top product-identity on shelf.

2. **Glamour on the Counter!** Visible, yet protected, Olin Cellophane overwrapped boxes make eye-catching displays.

3. **Travel No Trouble!** Test shipments show the new overwrap to be 100% damage-free.

4. **Holds Flavor!** Olin Cellophane retains fresh, just-made taste and flavor.

5. **Hot Weather No Problem!** High humidity and temperature tests prove new pack gained only 3 *grams* of moisture in 2 weeks, versus 9 *grams* in the old package.

6. **Stays Pure and Clean!** Tight-sealed Olin Cellophane pack keeps Chunky Chocolates pure and clean, shuts out odors and foreign matter.

7. **Savings Make Sense!** Savings on new Olin Cellophane overwrap offset increased costs of raw materials and labor.

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Mighty useful for manufacturing short-cuts, too. Be informed! Mail coupon now for FREE booklet full of valuable ideas!

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Good-looking all-cotton ties! . . Flat, won't mar or dent edges of boxes or merchandise . . Won't slip in the knot . . Non-stretch, great strength . . Also used as rip-cord opener, from candy bars to survival kits . . Ties anything!

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My Name_____
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Company_____
Address_____
City_____ State_____

U. S. patents digest

(Continued from page 176)

vided with interlocking means to hold the device in encircling relation about an object.

Box Blank Taping Machine, K. Sieg (to Samuel M. Langston Co., Camden, N. J.). U. S. 2,604,825, July 29. A machine for applying tape to successively advancing box blanks, including a movable member for forming a loop in the tape.

Apparatus For Making Packages, F. D. Palmer (to Package Machinery Co., East Longmeadow, Mass.). U. S. 2,604,836, July 29. Means for forming a flat blank into an end closure having a peripheral, laterally extending, inner flange part and a rebent outer flange part for applying such end closure to an end of a container body.

Carton-Erecting Machine, R. J. Hickin and C. H. Steel (to The Ohio Boxboard Co., Rittman, Ohio). U. S. 2,604,827, July 29. In mechanism of cooperating plunger and die type for erecting corner-lock cartons in which mating portions of the side and end walls at a corner are provided with cooperating interengageable slit and hook means, respectively, the combination with said plunger of means for distorting the carton side wall and adjacent to said slit means to open slit means for the reception of hook means and to confine hook relative to side wall.

Method Of Winding Composite Tubular Articles, C. W. Heinle (to American Can Co., New York, N. Y.). U. S. 2,604,830, July 29. A method of making spirally wound multi-ply composite tubes having an inner ply of metal foil, comprising applying a volatile organic liquid lubricant to the surface of the inner ply facing the mandrel to reduce friction between inner ply and mandrel.

Blade Package, J. Muros (to The Gillette Co., a corporation of Delaware). U. S. 2,604,977, July 29. A razor-blade dispensing package comprising a plurality of bare blades disposed one against another in progressively overlapping relation with a wrapper element folded upon itself and about one end of the blades to form a blade sheath.

Display Package With Transparent Wrapper, G. A. Moore (to National Biscuit Co., New York, N. Y.). U. S. 2,604,983, July 29. A package for articles arranged in a plurality of stacks comprising a holder open on two sides and having a rectangular bottom on which the stacks of articles are placed, an end at each end of the bottom extending upward to the tops of the stacks of articles, each end having a resilient lip extending over the adjacent stacks of articles.

Carrier For Bottles and Cans, M. I. Williamson (to National Folding Box Co., Inc., New Haven, Conn.). U. S. 2,605,034, and 2,605,035, July 29. A handle, particularly for a bottle carrier, comprising a carrier body consisting of a sheet of foldable material and including a bottom wall, side walls and top webs extending substantially at right angles with respect to the side walls, said handle consisting of a separate strip of foldable sheet material.

Article-Dispensing Paper Carton, W. J. Wells (to F. N. Burt Co., Inc., Buffalo, N. Y.). U. S. 2,605,038, July 29. In a carton, enclosing panels including a side panel and an adjacent attaching panel forming an extension of side panel and overlapping a third enclosing panel, a slit formation providing a dispensing opening in the carton and forming a closure flap for said dispensing opening.

Bag Construction, D. Belcher (to Bemis Bro. Bag. Co., Minneapolis, Minn.). U. S. 2,605,040, July 29 A preformed collapsed bag having a tubular body open at one end and composed of flimsy transparent plastic material, the top foldable surface areas at the open end of the body being coated with a stiffening adhesive extending downwardly from the top edge to substantially one-third the length of the bag.

Handle For Suitcase-Type Containers, C. D. Welshenback (to The Hinde & Dauch Paper Co., Sandusky, Ohio). U. S. 2,605,041, July 29. A suitcase-type container comprising a box body having a lid forming a side wall thereof that is hinged at one edge to a side of the box body forming the bottom wall thereof and that has a flap at its opposite edge adapted to underlie the top wall of box body, an elongated handle attached to flap centrally thereof, handle extending longitudinally of flap.

Prebreaking Mechanism For Carton Blanks, O. Welsh and E. D. Noreen (to The Sperry Corp., a corporation of Delaware). U. S. 2,605,679, Aug. 5. For carton blanks having a linear series of cut-out separator wall portions, each attached to the blank on

Put your product in an individual showcase

with

Styron Packages by Coast Craft Industry

Many companies, like this manufacturer of fishing tackle, have found that sales take a definite upward jump when their product is attractively packaged in glistening containers made of Styron (Dow polystyrene). You add not only eye-appeal, but thorough protection, too . . . Customers *see* what they want, *see* that quality is intact. Result . . . more sales, faster turnover of stock, more satisfied customers.

Styron's unique combination of *clarity* and *product protection* offers that extra *merchandising appeal* which conventional packages have never been able to obtain. Whether you are introducing a new product or rejuvenating a staple item in your line, sparkling Styron packaging will give it greater impetus, lift it into a far better selling position. And remember, costwise, Styron is competitive with other materials. Qualified molders can help you meet your specific packaging requirements.

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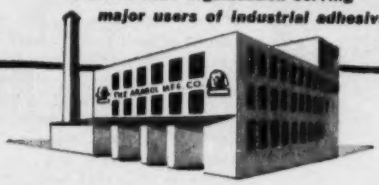

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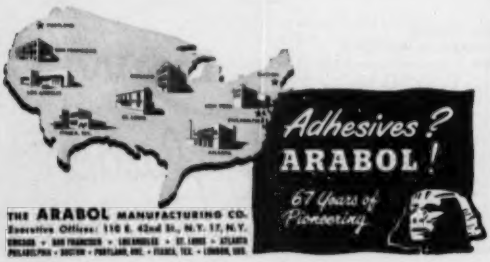

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U.S. patents digest

one end, a prebreaker mechanism for angularly bending the separator wall portions out of the plane of the blank.

Bottle-Cap Display Structure, J. P. H. Leavitt (to Container Corp. of America, Chicago, Ill.). U. S. 2,605,893, Aug. 5. A shipping container having a wall of corrugated paperboard comprising an outer liner sheet, an inner liner sheet and a corrugated sheet between and adhesively secured to the inner faces of said liner sheets.

Carton-Loading Device, J. F. Currivan (to Emhard Mfg. Co., a corporation of Delaware). U. S. 2,605,946, Aug. 5. In a cartoning machine a first conveyor operable to convey a series of cartons along a fixed path, a second conveyor having a portion operable to follow a second path parallel to said fixed path, second conveyor having a series of receptacles spaced therealong and mounted for transverse reciprocation thereon.

Carton, M. Burger (to Shellmar Products Corp., Chicago, Ill.). U. S. 2,605,951, Aug. 5. A cellular egg carton formed from a unitary blank and capable of assembly without adhesives.

Collapsible Cellular Carton, K. T. Buttery (to Sutherland Paper Co., Kalamazoo, Mich.). U. S. 2,605,952, Aug. 5. A carton comprising front and rear walls, bottom members joined to the lower edges of front and rear walls and inclined upwardly from edges, bottom members having transverse slots adjacent the opposite ends thereof, said carton having longitudinal partition members and a hingedly connected top.

Self-Locking Folding Box, R. B. Meller (to Bemiss-Jason Co., a corporation of California). U. S. 2,605,955, Aug. 5. A folding box made from a sheet of foldable stock and comprising a main panel, a first wall panel hingedly connected to main panel along a first fold line, a second wall hingedly connected to main panel along a second fold line extending at an angle with respect to first fold line, panels being foldable about fold lines with respect to one another.

Commodity-Dispensing Package and Wrapper Therefor, S. Rosen (to Milprint, Inc., Milwaukee, Wis.). U. S. 2,606,655, Aug. 12. A commodity package comprising a stack of flatly folded, highly flexible articles having overlapping adjacent edges; a flexible wrapper enclosing the stack and having therein relatively stiff re-enforcing sheets of approximately the same size and shape as that of the articles snugly engaging bottom and top of stack.

Packaging and Storing Wax Cakes, P. F. Dougherty (to Sun Oil Co., Philadelphia, Pa.). U. S. 2,606,656, Aug. 12. A wax package comprising, in combination, a plurality of cakes of wax having flat faces arranged in stack formation and a water-absorbent, water-wet separator having an area at least as large as wax cakes interposed between each of the opposing flat faces.

Tear-Strip Can With Cable Loop Pull, J. Henchert (to Continental Can Co., Inc., New York, N. Y.). U. S. 2,606,688, Aug. 12. In a metallic receptacle, a body having score lines extending thereabout and defining a tear strip ending in a free tongue extension and adapted to be torn out to open the receptacle.

Filling Machine, A. T. Phillips (to National Packaging Machinery Repair Co., Chicago, Ill.). U. S. 2,606,693, Aug. 12. A filling machine for filling packages from the contents of a hopper, comprising a rotatable hopper having an intermittently rotating base provided with spaced ports.

Compartmental Folded Paperboard Carrier With Handle, H. W. Forrer (to Atlanta Paper Co., a corporation of Georgia). U. S. 2,606,711, Aug. 12. A light-weight paperboard carrier structure comprising a bottom wall, opposed end walls foldably joined to bottom wall, a side wall half-lap foldably joined at each side edge of each of end walls and extending therefrom.

Bottle Carrier, M. H. Kowal (to Empire Box Corp., Garfield, N. J.). U. S. 2,606,712, Aug. 12. A one-piece, open-topped, compartmented bottle carrier formed from cardboard, when erected, bottom and side walls, center and cross partitions define six compartments.

Sealing Machine and Method, T. E. Piazze (to Shellmar Products Corp., Chicago, Ill.). U. S. 2,606,850, Aug. 12. In a bag top-sealing machine, means for conveying a filled bag in a substantially horizontal direction with the bag in upright position and its open top uppermost, means for bringing opposite walls of top of bag into flat folded relation.

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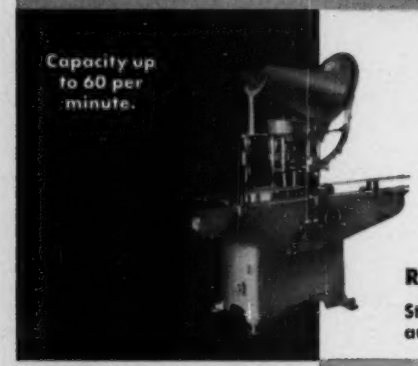

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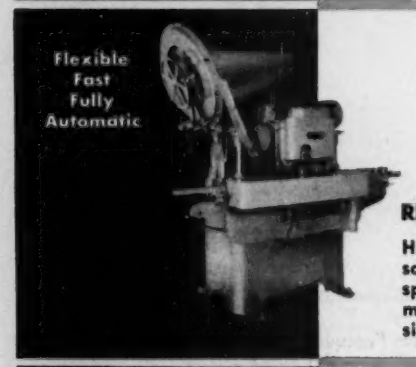

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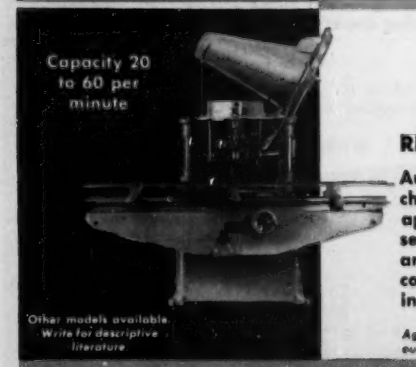

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Container outlook

Although the economic implications of the steel-labor dispute pervaded the general business activity of the second quarter, the major steel work stoppage had comparatively minor effect on total second-quarter demand and output of container and packaging materials, says the autumn, 1952, issue of the Department of Commerce quarterly, *Containers & Packaging*. Notwithstanding the curtailed output of several types of containers caused by the strike, which extended into the first part of the third quarter, the over-all level of second-quarter container production remained satisfactory and generally improved over the preceding quarter, with all requirements met, according to the Commerce publication.

Discussing the short-term outlook, the Department expects all types of containers not basically dependent on steel to be readily available for fall demand; development of an early and substantial holiday trade was forecast in view of the maintenance of users' container inventories at or near liquidation levels and the continuance of high-level industrial production, principally from the impetus of defense work and plant expansions. These factors alone, the Department's publication indicates, point to a moderate increase in business in the final half of 1952 over the first half of the year and also over the abnormally slow second half of 1951.

In commenting on the steel strike's effects on the container industry, it was noted that operations of manufacturers of paper, plastics, glass and wood containers and of packaging materials were "only minutely" affected. When shipments from mills virtually ceased, manufacturers of metal cans consumed plate inventories to maintain output. Tension over availability of cans for the perishable food pack was greatly relieved, however, by cooperation between the National Production Authority and the industry in reserving all available tinplate for that specific purpose. This move, together with resumption of shipments of steel from mill warehouses upon the steel-labor reconciliation, undoubtedly averted widespread and possibly irreparable damage to the economy. Metal cans for purposes other than perishable foods are expected to remain tight until the perishables' requirements are met.

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EQUIPMENT • SUPPLIES • SERVICES

HIGH-SPEED AUTOMATIC CASE CLEANER. Folder describes an automatic machine which air-cleans used beverage cases before they are refilled at the bottle packer. Standard-Knapp, Div. of Emhart Mfg. Co. **(J-251)**

AUTOMATIC PACKAGING MACHINE. Details on an automatic machine for liquids, powders and other items, which makes a bag, fills and heat-seals it in a continuous operation. Bartelt Engineering Co. **(J-252)**

BAG HOLDERS FOR SCALES. Brochure illustrates four different bag holders which secure bags to hopper outlets for filling. Manual and air-operated models. Richardson Scale Co. **(J-253)**

"STERILSHIELD" CABINET FOR AMPUL AND VIAL FILLING. Descriptions and specifications of enclosed work benches and tables which provide a sterile area for ampul and vial filling and similar operations. Popper & Sons, Inc. **(J-254)**

MARKING EQUIPMENT FOR INDUSTRY. Catalog with data on various marking machines—conveyor line markers, multiwall bag printer, a corrugated and fiber shipping case printer and several hand operated printers. Contains chart of available base-lock rubber type and price list. Industrial Marking Equipment Co. **(J-255)**

LARGE MODEL "TRANSWRAP." Details about the Model "C" Transwrap, a new machine for automatically forming, filling and sealing packages up to 9¾" by 13¾". Transparent Wrap Machine Corp. **(J-256)**

TUCK END CARTON SETUP MACHINE. Folder describes the "Tuck-O-Mat," a machine for automatically setting up reverse tuck cartons of almost any size or shape. Includes data on a conveyor for use with the setup machine. Machinery Mfg. Co., Inc. **(J-257)**

WRAPPING MACHINE FOR ODD SHAPES. Description of a machine designed to wrap cologne sticks, deodorant sticks, shaving sticks and other very soft and delicate products in aluminum foil. Adjustable to different sizes and shapes. American Roland Corp. **(J-258)**

LIQUID DISPENSERS. Catalog and price list on Calmar plastic sprayers, atomizers and mohair applicators for easy dispensing of liquids from jars and bottles. Calmar Co. **(J-259)**

AUTOMATIC WEIGHING AND FILLING MACHINE. Information on a high speed weighing and filling machine incorporating the exclusive "Hy-Tra-Lec" principle of weighing with new mechanisms for handling the product being packaged. Wright Machinery Co. **(J-260)**

PACKAGING IN ALUMINUM TUBES. Colorful brochure traces history of aluminum tubes and gives details on advantages, coatings, manufacture, decorations, closures and weights and capacities. Aluminum Co. of America. **(J-261)**

CARTON FORMING AND LINING MACHINE. Booklet explains the operation and lists specifications of Peters machines for forming, lining, folding and closing die-cut cartons at high-speed. Peters Machinery Co. **(J-262)**

FOIL TUMBLER CAPS. The features and advantages of sealing cottage cheese and other products in reusable tumblers capped with "Alseco" foil caps. Aluminum Seal Co., Inc. **(J-263)**

FULLY AUTOMATIC FILLING SCALE. Description of a scale which automatically holds, fills, check-weighs, releases bags of bulk materials after preweighing loads to accuracy within plus or minus 1/10 pound of any desired weight from 25 to 200 pounds. Thayer Scale & Engineering Corp. **(J-264)**

CELLULOSE FILM. Five informative little leaflets which discuss the fading of printing ink and the use of regenerated cellulose film for the direct wrapping of jellies, sweets and dates, and for the packaging of metal products. British Cellophane Limited. **(J-265)**

PACKAGING IN PLASTIC VIALS. Bulletin illustrates a varied range of hardware and other small products which can successfully be packaged in screw-top and plug-top plastic vials. Lerner Plastics, Inc. **(J-266)**

AUTOMATIC FLANGE BENDERS. Specification sheet and description of a machine which automatically bends the flanges of box blanks during the box making operation. M. D. Knowlton Co. **(J-267)**

"PLIOFILM LINED BAGS." Leaflet describes "Kard-O-Pak," a self opening, flat bottom bag with a protective "Pliofilm" liner for packaging foods, chemicals, drugs, and similar products. American Bag & Paper Corp. **(J-268)**

PACKAGING MACHINES FOR LIGHT-WEIGHT PRODUCTS. Details on several high-speed automatic machines for packaging light-weight products such as potato-chips, corn-curls, etc., into bags, boxes and cans. The Woodman Co., Inc. **(J-269)**

CARTONERS. Bulletin briefly describes the Jones fully automatic and semi-automatic cartoners and gives a partial list of users of the fully automatic cartoner. R. A. Jones Co., Inc. **(J-270)**

HYDRAULIC CORE JACK. Folder tells about the Dusenbery Model 500 hydraulic core jack for simplifying the operation of pressing chucks into mill rolls. Specifications included. John Dusenbery Co., Inc. **(J-271)**

SEALING AND BONDING RUBBER PLATES. Bulletin contains specifications and directions for use of several cements and tapes which are employed in adhering rubber plates to cylinders. Mosstype Corp. **(J-272)**

DOUBLE EMBOSSER. Magazine reprint explains the advantages and operation of a double embosser which speeds change-over time from design roll to design roll. Dilts Machine Works. **(J-273)**

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IMPRINTING MACHINE. Description of the Markem Model 25A machine which is used for carton and box marking, imprinting on parts and products, and variable detail on large labels. Markem Machine Co. (J-274)

ENGRAVED INKING ROLLERS. Bulletin illustrates various "Evenflo" precision engraved rolls for applying ink, plastic, adhesives, and other fluids in aniline presses. Paper Machinery and Research Corp. (J-275)

"ALATHON" POLYTHENE RESINS. Booklet explains properties of "Alathon" polythene resin as they pertain to the packaging of foods, pharmaceuticals, cosmetics, chemicals and other products. Lists forms available. E. I. du Pont de Nemours & Co., Inc. (J-276)

FORK-LIFT AND PLATFORM-LIFT POWER TRUCKS. Brochure illustrates and describes various trucks which haul, maneuver, and stack palleted and other loads with great efficiency. Lewis-Sheppard Products, Inc. (J-277)

AUTOMATIC WRAPPING MACHINES. Booklet gives many examples of products which have been successfully merchandised after having been wrapped with machines made by the Hudson-Sharp Machine Co. (J-278)

VACUUM FEED LABELING MACHINE. Bulletin explains the features and operation of the Mercury "Vacumatic" heat sealing and labeling machine which feeds, folds and seals label and bag in one automatic operation. Mercury Heat Sealing Equipment Co. (J-279)

AUTOMATIC VIAL AND BOTTLE-CAPPING MACHINE. Folder describes a high-speed flexible unit which inserts caps and stoppers into a wide range of vial and bottle sizes. Duran Brothers, Inc. (J-280)

PACKING GRADE FOAMABLE RESIN. Booklet describes an extremely light weight foamed phenolic resin which is suggested for reduced packing time and superior protection from breakage. Bakelite Co., Div., of Union Carbide and Carbon Corp. (J-281)

HYDROTONE INK COLOR SELECTOR. Selector shows 80 different standard ink colors, and dozens of color combinations for printing kraft, tissue, or other absorbent stocks. Bensing Brothers and Deeney. (J-282)

PLASTIC PACKAGES. "Executive Newsletter" contains an article of interest to packagers who might use molded or fabricated plastic boxes for packaging their products. Monsanto Chemical Co. (J-283)

TAPES FOR SEALING. Bulletin gives applications and physical properties of "Scotch" brand pressure sensitive tapes for can, tube and bottle sealing. Minnesota Mining and Manufacturing Co. (J-284)

MILITARY PACKAGING SUPPLIES. "Flankin" folder contains samples and data on a number of protective barrier materials which are approved for use under specifications MIL. B-131 A, JAN-P-131 (Amendment 3, Type 1), AN-B-20 (Type 2). Price list included. Acme Backing Corp. (J-285)

TAMPER-PROOF AND SCREW CLOSURES. Folder with numerous application photos showing how "Filma-Seal" closures and regular screw caps are used to protect various products from leakage, evaporation, air and moisture exchange, and tampering. Ferdinand Gutmann & Co. (J-286)

ENGRAVING GRAVURE CYLINDERS. Booklet explains and illustrates the many steps involved in transforming artwork into a finished, polished, rotogravure printing cylinder. Southern Gravure Service, Inc. (J-287)

FABRICATED TRANSPARENT PLASTIC BOXES. Bulletin shows several sizes and shapes of cardboard-base transparent plastic boxes which are suitable for packaging flowers and similar products. Weinman Bros. (J-288)

"VELVA-GLO" FLUORESCENT IDEA KIT. File folder contains samples, color cards and suggestions connected with the use of fluorescent papers, cardboards, silk screen colors and brushing colors for promotional and packaging applications. Radiant Color Co. (J-289)

GUMMED TAPE PRINTER. Details on the "Tape-Printer" for printing advertising messages, inventory data, and other information on gummed tape as it is run through an automatic tape machine. American Tape Printer Co. (J-290)

VARIABLE SPEED TRANSMISSIONS. Bulletin tells about the "Fra-sure" variable speed transmission for speed control of fractional horse power motors which run packaging machines. Frazier & Son. (J-291)

BAGGERS. The Anderson Model 134 bagger used for the handling of small paper bags and the Model 184 bagger are both presented in this bulletin. Price list included. Anderson Brothers Mfg. Co. (J-292)

CELANESE ACETATE SHEETING AND FILM. Brochure gives sizes, colors, physical and thermal properties, formulations, applications, and forms available for Celanese acetate sheeting and film. Celanese Corporation of America. (J-293)

"ECO" CONTAINERS. Bulletin discusses the features of an air-tight-, sift-proof paper package which is formed, filled and sealed automatically at high-speed and is suitable for frozen foods and other applications. Alfred Hofmann & Co. (J-294)

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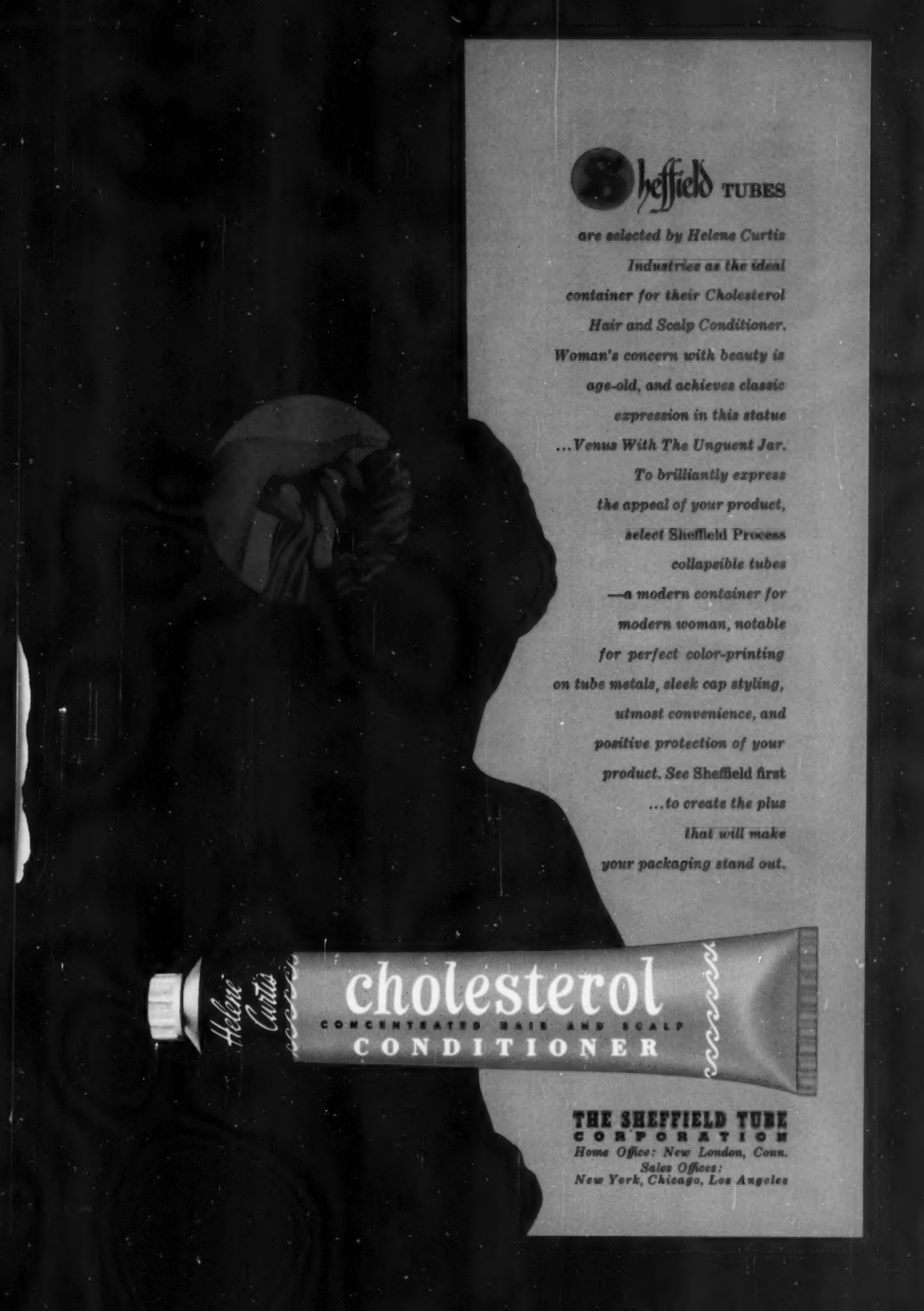
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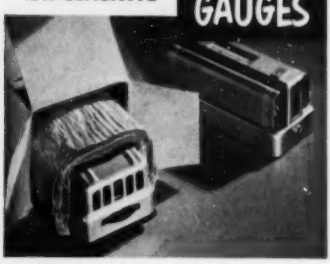

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Cracker Jack

(This article continued from page 104)

these unsolicited letters, recognizing that they comprise a direct pipeline to buyers of the product which not only builds a stronger relationship between manufacturer and the consuming public, but also provides helpful information on reactions to new toys, product quality and many other significant matters.

Regular tours are conducted through the production, packaging and other departments of the Cracker Jack plant. During the past year, several thousand visitors participated in these tours. Interest has grown to the extent that reservations are made in advance, most of the parties consisting of children's groups accompanied by adult leaders. The company's complete preventive sanitation program, established in the interest of product protection, also insures that the plant presents an attractive appearance to visitors at all times. The program is set up to control possible sources of contamination from raw materials to wrapping or packaging of finished goods, with the plant divided into sanitation areas covered by general and special inspection procedures.

Periodic inspections are recorded on forms that are supplied to each inspection station.

Product quality

In a riddle book distributed many years ago, Rueckheim Bros. & Eckstein stated that in their plant "enough corn is popped each week to make a good-sized snowstorm." Today that snowstorm would probably attain blizzard proportions.

Product quality is, of course, one of the "must" elements in sales success apart from good packaging. In order to assure itself of ample supplies of raw popcorn meeting its strict specifications, Cracker Jack maintains extensive storage and handling facilities in Illinois and Iowa. The harvested corn is stored in large, modern cribs built on concrete piers for natural curing. Popcorn is shelled and cleaned by passing it over a series of vibrating screens under pressure of air to remove chaff and foreign matter. Since the corn retains moisture much better on the cob, it is shelled as shipments are scheduled to the Chicago plant, where it is retained in huge storage bins until ready for processing. At Chicago, samples of corn shipments are constantly tested by the laboratory for "poppability" and other qualities. To supplement corn supplies from its own facilities, the company buys in the open market when necessary.

At the beginning of World War II, the company's experience of many years in moistureproof packaging led to its cooperation with the Government in packing special food items requiring a similar type of protection. Most of the packaging equipment was converted to handle rations for the Quartermaster Dept. and food materials for the Dept. of Agriculture, while production of the company's own line of products was greatly curtailed. In cooperation with the Chicago Quartermaster Depot, Cracker Jack had been experimenting with emergency rations prior to Pearl Harbor and received its first contract for the packaging of a trial run on Dec. 15, 1941.

During the wartime emergency, the company packaged eight types of Army and Navy rations representing nearly 100 million individual meals, as well as 95,862,960 doz. eggs in powdered form.

Cracker Jack distribution is through the usual channels, but especially, during the summer months, at ball games, circuses, outdoor theaters, parks, zoos, beaches and other places where people gather to enjoy themselves and therefore welcome treats.

Consumer advertising is concentrated in selected comic books and related media carrying the Cracker Jack message to 25 million youngsters. Aiming its ads at a group ranging almost from infancy to well toward adulthood, about equally divided between boys and girls, the company has found that it can bracket the field effectively with these publications. Dominating full-page back-cover ads in bright colors highlight the famous package and usually feature a consumer offer such as assorted party balloons, a magic pencil or magnetic car obtainable by mailing in box labels with a small cash payment. The company has recently been testing the effectiveness of television advertising through participation in a program called Movie Quick Quiz.

In its early days, Cracker Jack did

Here's the cap for high-speed lines

You can get greater speeds on your lines with Armstrong's new "Hi-Tork" Molded Caps. Here's why:

"Hi-Tork" caps are built especially to take the abuse of high-speed lines. They're strengthened at points of stress to resist extra torque and impact. Their recessed design leaves no projections to chip or cause breakage.

The greater contact area of their threads also gives them greater strength with less strain. All these improvements combine to give you greater output with fewer rejects and less downtime.

We'll gladly help you test them on your own lines. Just call your near-by Armstrong office or write Armstrong Cork Co., Glass and Closure Div., 5910 Prince Street, Lancaster, Pennsylvania.

ARMSTRONG'S "*HI-TORK*" MOLDED CAPS

Molded for extra production on high-speed machines

new improved
FIBRO-PAD
Guarantees Perfect
"2-IN-1"*
PACKAGING
PROTECTION
*1. CUSHIONS against shock and pressure!
*2. SHIELDS against water, grease, abrasion! Amazing new FIBRO-PAD combines super-soft inner pad of chemically neutral Tufflex® with strong outer casing — provides barrier wrap and cushion in one time-and-money-saving operation!
WRITE TODAY for FREE FIBRO-PAD Sample Kit and name of your nearest Distributor! T.M. Reg. W.C. Co.
UNLIMITED VARIETY OF SIZES AND THICKNESSES FOR EVERY PACKAGING PURPOSE!
CHOICE OF 5 OUTER WRAP BARRIER MATERIALS MEET ALL GOVERNMENT SPECIFICATIONS:
1. JAN-B-121: Grade A, Greaseproof, Non-Corrosive
2. JAN-B-130-A: Non-Corrosive, Creped Neutral Kraft
3. JAN-P-125: Type C-1 Waterproof, Asphalt Laminated
4. VCI-MIL-P-3420: Vapor Corrosion Inhibitor Wrap
5. COMMERCIAL USE: Heavy-Duty Dry Waxed Kraft
FIBLECO ILLINOIS CORPORATION
311 North Desplaines Street
CHICAGO 6, ILLINOIS
MANUFACTURERS OF FIBRO WATERPROOF CASE LINERS · SKID COVERS · BLANKETS · SHROUDS · KRAFT LINERS & COVERS

MOSSE Linens NEW YORK
Krome-Kraft
Dugan's PURE STRAWBERRY PRESERVES
There's More Than Glue Behind These Labels there's CAMEO
And experienced label users have learned through the years that when Cameo makes a label, be it embossed, printed or plain, foil or paper — it is an example of label-making at its finest.
MUSHROOMS
ANN BARTON. cologne
Dulcette
CAMEO DIE AND LABEL COMPANY
Creators of fine Labels, Tags and Packages
154 WEST 14th STREET, NEW YORK 11, N. Y.

considerable billboard advertising built around a series of humorous illustrations, but this medium has not been used for a number of years. In addition to consumer advertising, the product is promoted directly to the trade in various food publications.

CREDITS: *Cartons, Container Corp. of America, 38 S. Dearborn St., Chicago; Michigan Carton Co., Battle Creek, Mich., and A. Geo. Schulz Co., 433 W. Clybourn St., Milwaukee, Wis. Printed carton wraps, Central Waxed Paper Co., 5100 W. Roosevelt Rd., Chicago, and Kalamazoo Vegetable Parchment Co., Kalamazoo, Mich. Paper for waxing, Marquette Paper Co., 700 W. Lake St., Chicago. Pressure-seal "Wax-Seel" paper for prizes, Munising Paper Co., 135 S. LaSalle St., Chicago. Prize-wrapping machines, Bartelt Engineering Co., 317 S. Madison, Rockford, Ill., and (specially built) by TAB Engineers, Inc., 767 N. Milwaukee Ave., Chicago. Carton-wrapping machines, Package Machinery Co., East Longmeadow P. O., Springfield, Mass. Automatic casers, Standard-Knapp, division of Emhart Mfg. Co., Portland, Conn. Coding machines, Kiwi Coders Corp., 3804 N. Clark St., Chicago. Wax-coating machine, Mayer Coating Machine Co., Rochester, N. Y. Dipping wax, Moore & Munger, 33 Rector St., New York. Prizes manufactured by Carnival Plastic Co., Rochester, N. Y.; Cloudrest Studios, Chicago; Formold Plastics, Inc., 3145 S. Wabash Ave., Chicago; Lind Plastic Products, Inc., 6900 Central Park, Chicago; Makatoy Co., Inc., 1755 W. North Ave., Chicago; Midwest Molding & Mfg. Co., 4630 W. Fullerton, Chicago; National Lock Co., 1902 Seventh St., Rockford, Ill.; Nosco Plastics, Inc., Erie, Pa.; Plastic Molded Products Co., 6044 N. Pulaski Rd., Chicago, and Superior Plastics, 426 N. Oakley, Chicago.*

Converters busy

The National Flexible Packaging Assn., Cleveland, Ohio, reports that a late summer survey conducted by the organization revealed that, among the packaging converters checked, 83% reported their order rate rising. Volume of business during the fourth quarter equal to or exceeding that of the same period of last year was anticipated by 77% of the converters checked.

The association advised users of flexible packaging to order further ahead. Customers' inventories were said to be at low levels, with the result that many orders were specifying extremely short delivery times. Such service, the association pointed out, cannot be continued into the busy season.

Giant Display Carton

No Carton Too Large...

Consumer Carton

...or too small!

ACM CARTONS!

The cartons pictured show the scope of the facilities of the leader of the carton industry — The American Coating Mills Corporation.

ACM cartons are everywhere — Drug Stores, Candy Shops, Department Stores, Fashion Shops, Grocery Stores, Soft Drink Parlors, Hardware Stores, Jewelry Shops, Liquor Stores, Beer Depots, Supermarkets, etc. — perfect proof of the confidence of the manufacturers of America in the ability of ACM cartons to move their merchandise at the point of purchase.

A letter, wire or phone call to the American Coating Mills Corporation will bring an ACM representative to your plant for a "no cost to you" consultation on your packaging problems.

AMERICAN COATING MILLS CORPORATION

ACM CARTONS — CLAYCOATED BOXBOARD

Subsidiary of Robert Gair Company, Inc.
General Offices: Board of Trade Bldg., Chicago 4, Illinois
Offices in Principal Cities

Behind the scene!
Efficient pre-packaging table.

switch from

your *VisQueen** converter will show you how pre-packaging boosts volume 20% with higher profit margin!

Out front! Typical Visqueen Pre-Packaged Produce.

Working together, VISQUEEN and VISQUEEN converters give you the ideal transparent produce pre-packaging material. VISQUEEN converters have full details based on experience. They will plan and set up your pre-packaging installation. They know what equipment gives you a fast, economical operation at less cost with VISQUEEN.

A store doing $2,000.00 worth of produce business per week, can and should use pre-packaging. Customers prefer this cleaner, neater, more efficient and economical operation. *Waste loss can be reduced to 1% or less.* That means a saving of at least 5%. Because Mrs. Housewife can shop faster with pre-packaging, she has more time to spend in other departments. This results in increased sales for the entire store. Let VISQUEEN converters show you!

VISQUEEN, naturally, is the ideal film for pre-packaging produce. It won't shatter, split, crack or run . . . is non-aging, odorless and tasteless, keeps produce moist and fresh. VISQUEEN literally "breathes" so vegetables get ample oxygen. VISQUEEN is hard to puncture or tear.

See a VISQUEEN converter. They are the only ones who can give you the benefit of acknowledged polyethylene leadership. Let them place technicians in your plant or store to show you how to set up a pre-packaging operation. It's money in your pocket.

bulk produce to complete pre-packaging in a few days!

VisQueen*

pre-packaging gives you this . . .

- Speeds traffic at point of sale and check out
- Creates more impulse buying
- Improves eye-appeal
- Encourages larger purchases
- Helps control weights
- Almost eliminates customer handling
- More sanitary
- Reduces waste—stops spoilage
- Customer "bonus" in reusable bag
- Utilizes store personnel during slack periods

IMPORTANT!

VISQUEEN film is all polyethylene, but not all polyethylene is VISQUEEN. VISQUEEN is the only film produced by process of U.S. Patent No. 2461975. Only VISQUEEN has the benefit of research and technical experience of The Visking Corporation; pioneers in the development of polyethylene film.

Use coupon below for names of converters in your area. DO it better—

do it with VISQUEEN

VisQueen* film . . .

a product of the VISKING corporation

World's largest producers of polyethylene sleeving and tubing

Preston Division, Terre Haute, Indiana

In Canada: Visking Limited, Lindsay, Ontario

T. M. The Visking Corporation

THE VISKING CORPORATION, BOX H10-1410
Preston Division, Terre Haute, Indiana

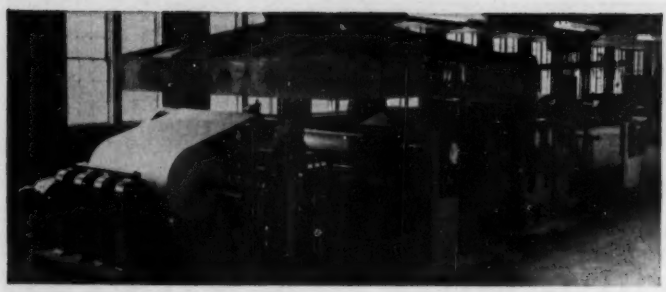
Please send names of VISQUEEN converters in my area.

Name.....

Company.....

Address.....

City..... Zone.... State.....



for Waxing Speed and Versatility

CONVERTING MACHINERY FOR:

LAMINATING • EMBOSSING
WINDING • UNWINDING
SHEETING • GUMMING
COATING • CREPING

Would you like to apply wax at 20 miles per hour? You can, once you're equipped with a Dilts Waxing Machine.

Dry wax, wet wax, laminates—a multitude of applications in a wide range of basic weights—are being evenly applied under rigid control with Dilts Waxers.

The waxer shown above is one of the most recent and most versatile of Dilts installations. It features the Kohler system of constant tension, two waxing sections, laminating attachment, patented water finish and an all-electric sectional drive.

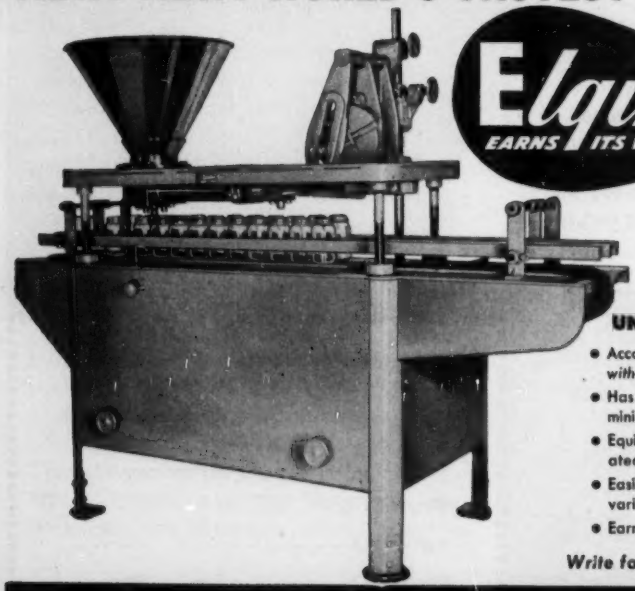
Production speeds of from 1000 to 1500 f.p.m. successfully maintained. **Write for Bulletin 1-DM**

Dilts

Contact

DILTS MACHINE WORKS
FULTON, N. Y.
Division of The Black-Clawson Co., Hamilton, Ohio

NEW! NEW! WORLD'S FASTEST DUO-VALVE FILLER



Elgin EARNS ITS WAY **"SPEED-KING"**

for Liquid and Semi-Liquid Products

CHECK THESE UNIQUE ELGIN "SPEED-KING" FEATURES

- Accommodates all sizes of jars or tin from 1 oz. to 1 gal., *without change parts.*
- Has smooth variable speed continuous conveyor, giving minimum indexing motion.
- Equipped with Fine-Fill adjustment, which may be operated while machine is in action.
- Easily cleaned and quickly adjusted to handle a wide variety of products.
- Earns its way in labor and overhead savings.

Write for descriptive literature, address Dept. MD

ELGIN MANUFACTURING COMPANY • 200 BROOK STREET • ELGIN, ILLINOIS

Shortage averted

Tinplate supplies for enough cans to fill 1,000 freight cars were rushed to American Can Co.'s West Coast plants in mid-August to help supplement stocks badly depleted by the 53-day steel strike. The emergency shipment of tinplate was borrowed from American Can's three Hawaiian factories, and was delivered by fast freighter.

The emergency operation by the container manufacturer was said to have cost the company "considerably more than $100,000." However, C. W. Roberts, American Can Co.'s Pacific Division vice president, said that the main concern was to make cans available at canneries when they were needed. The shipment from Hawaii helped assure an adequate supply of containers for California, Oregon and Washington fruit and vegetable crops. Plants of American Can Co. which received portions of the plate shipment are located at Sacramento, Stockton, Oakland, Jan Jose, Monterey, Los Angeles, Wilmington, San Diego, Portland and Seattle.

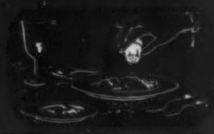
Coincidence of the long-drawn-out steel strike with the harvest seasons of many important food crops threatened for a time to cause severe damage to the economy through spoilage of perishable foods.

Bootleggers curbed

Bootleggers are being forced to salvage old cellulose sealing bands from dump heaps because the manufacturer of the bands is cooperating with the Federal Alcohol Tax Unit by selling only to licensed distillers. As a result, according to an article appearing in *Newsweek* magazine, consumers can recognize a bootleg bottle. The magazine said that re-used bands are shorter than ones found on legal liquor bottles because of the shrinkage in size which occurs when the bands, originally cut in two when the cap is taken off, are reused. The mended tax stamps used by bootleggers are only 5⅜ in. long, while those on legitimate bottles measure 6 in.

The important role played by cellulose bands in protecting legitimate distillers and consumers was stressed by T. W. Holland, sales manager for Du Pont "Cel-O-Seal" bands, who said that the company had promised to supply only licensed distillers at the time the bands were originally developed by the company.

Why GITS ware uses Kum-Kleen labels...



Kum-Kleen **LABELS HELP SELL...** There's an eye-catching Kum-Kleen informative label on every Gits-Ware Plastic shaker or spicer...right at the point-of-sale where *extra salespower* really counts!

Product identification, sales pitch, guarantee and price spot are all combined in one *self-adhesive* label that stays stuck on plastic surfaces, yet is easily removed by the housewife without soaking or scraping.

Kum-Kleen **LABELING IS MORE ECONOMICAL...** Patented Avery dispensers feed die-cut, pressure-sensitive labels off roller tape, ready to be LAID ON any clean, smooth surface. A finger touch does it *fast*...no moistening...no sticky fingers.

Kum-Kleen **LABELING IS FASTER...** Many users say Kum-Kleen labeling is *5 times faster* than other methods.

Kum-Kleen **LABEL APPEARANCE...** They stay neat and attractive in spite of rough usage. Even under extremes of temperature and humidity they won't dry out, peel, curl or pop.

Kum-Kleen **LABELS ARE USED FOR...** Help-Sell Features • How-to-use-it data • Nameplates • Trademarks • Instructions • Guarantees • Approval Seals • Diagrams • Inspection • Routing • Prices • Warning • Repair Jobs...and many others

WHERE CAN YOU USE THESE LABELS IN YOUR BUSINESS?

Creators of Kum-Kleen the World's First Pressure-Sensitive Label

AVERY ADHESIVE LABEL CORP.
117 Liberty Street, New York 6 • 608 South Dearborn Street, Chicago 5
1616 South California Avenue, Monrovia • Offices in Other Principal Cities

☐ *Please send case histories, free samples and prices.*

☐ *Have the Avery label man call.*

NAME_____

TITLE_____

COMPANY_____

ADDRESS_____

No. 4 in a series

The **CLEVELAND CONTAINER COMPANY** presents the fourth in a series of informative messages to assist all manufacturers, distributors or sellers of products which require more efficient, economical and attractive packaging.

FUNDAMENTALS OF CONTAINERS IN PACKAGING!

Type No. 4—Metal End Friction Plug Can

This is the most widely used of all fibre and composite type containers, and provides many distinctive and economical packaging applications. It is used principally in packaging dry powders such as chemical drugs, cleansers, photographic chemicals, deodorants, moth crystals, bath salts, spices, malted milk powder, and other similar products.

WIDE RANGE OF SIZES . . . Available from an inside diameter of 1-19/32" to 6-3/4" maximum. Lengths as desired.

CONSTRUCTION ADVANTAGES . . . The spiral sidewall in the smaller sizes is made with a minimum of two plies of quality chipboard. Wall thicknesses increase with increased diameters and lengths. The use of metal closures at both ends of the container results in a package of exceptional strength and rigidity which may be used and reused many times. Such a container, by nature of its construction, permits the use of the maximum area for labeling or printing, because a minimum of metal is required to seal both ends.

SPECIAL LINERS . . . This can provide an ideal package for hygroscopic or oil base chemicals and like products in the use of spiral wound inner liners of moisture or grease resistant papers. Parchment, glassine, aluminum foil, duplex kraft, cellulose acetate, saran and polyethylene are a few of the special type liners used.

CLOSURES . . . For most practical purposes, the ends of the container are made of electrolytic tin plate, a plain metal end for the bottom and a ring for the top. Both ends have a deep draw to ensure a tight, flat seam to the sidewall of the container. Because of corrosive action of some products, black plate, aluminum, or other types of coated tin are used for closures. The metal top ring is designed to ensure the greatest diameter opening. The top ring and the closing plug are formed of a heavier gauge metal to withstand repeated opening and sealing during use. Metal ends may be coated with bright color lacquers or baked enamels. Pouring spouts and perforations in the bottom closure can be furnished for additional convenience in dispensing the product. Embossing metal ends to customer requirements further identifies company or product.

LABELS . . . In addition to labels, direct printing on the container, a continuous printed wrap, or decorative paper spirally wound on the outside of the container, are available.

DELIVERY INSURANCE . . . High test corrugated cartons are used in shipping Cleveland Containers. Cartons are of uniform size to ensure ease in handling, and to save valuable storage space.

* * *

WHY PAY MORE? FOR THE BEST

CALL CLEVELAND!

The CLEVELAND CONTAINER Co.

6201 BARBERTON AVE. CLEVELAND 2, OHIO

- **All-Fibre Cans • Combination Metal and Paper Cans**
- **Spirally Wound Tubes and Cores for all Purposes**

* * *

PLANTS AND SALES OFFICES: Cleveland, Detroit, Chicago, Plymouth, Wisc., Jamesburg, N. J., Ogdensburg, N. Y. • ABRASIVE DIVISION at Cleveland SALES OFFICES: Grand Central Terminal Bldg., New York City; Washington Gas Light Bldg., Washington, D. C.; West Hartford, Conn.; Rochester, N. Y. Cleveland Container Canada, Ltd., Prescott, Ontario • Offices in Toronto and Montreal

Write for additional copies of this message.

Hot bread idea spreads

Development of printed cellophane bread wrappers which can go into a hot oven with the bread has sparked a new sales promotional idea for the baking industry. Consumers who buy bread in the new wrap can place it in a home oven heated to 200 deg. F. for 15 or 20 minutes to "recapture the fragrant, crusty goodness of a fresh-baked loaf right out of the baker's oven."

Loaf in the new heat-resistant wrap as used by Snowflake Bakery of Honolulu.

The wrapper protects the bread from drying out during the oven heating, and is said to be able to take several reheatings, so heating is not restricted to the first serving from a freshly opened loaf. Bakers are using the special heat-resisting wrap for standard baker's loaves, sliced loaves, rolls and novelty breads. It is all fully baked bread and, although the packages stress the hot-bread theme, all take care to say that the bread is a standard, fully baked product that need not be heated and can be enjoyed "as is."

Hot-bread promotions using the new wrap were inaugurated last spring and the supplier of the wraps reports a larger-scale national promotion launched recently to take advantage of the fall emphasis on hot foods. Bakers of all types are said to find that the idea can boost bread consumption and many users of the wrap are backing up the idea with promotional drives to get attention. The wrap supplier supplies point-of-purchase display material and free newspaper mats, radio and TV commercial copy and merchandising suggestions. Sample-sized hot-bread packages have proved popular for distribution, sometimes as part of store demonstrations. Mead's Bakery, Inc., a multiple-unit wholesale bakery distributing in Texas, Oklahoma and New Mexico, is reported to have made extensive use of sampling bags this summer; the bags were printed in the same yellow, blue and red design the firm uses for the full-sized hot-bread wrappers for its Butter Bread.

Snowflake Bakery, of Honolulu, T.H., is using the hot-bread wrapper for its SnowKrisp Enriched Old Fashioned Hot Bread, a special round twin loaf, which uses the heat-resistant wrap printed in red and dark brown accented against white. Other concerns with hot-bread promotions under way include the Spang Baking Co., Cleveland, Ohio, a house-to-house delivery bakery; Land O' Lakes Bakery, an independent wholesale bakery in Wausau, Wis., and City Baking Co., Akron, Ohio, an all-retail operation.

CREDIT: *Printed cellophane hot-bread wraps, Milprint, Inc., 4200 N. Holton St., Milwaukee 1, Wis.*

Flexible Containers IAC report

Sales of flexible plastic containers during June, July and August increased by about 5 to 10%, members of the Flexible Plastic Containers Industry Advisory Committee told the National Production Authority, Department of Commerce, recently. Committee members claimed unit volume increased more than dollar volume, in comparison with last June. Several members warned that the tendency of customers to work with very low inventories could lead to temporary artificial shortages if world conditions should cause customers to start building inventories. Current delivery requirements are largely of an immediate nature, it was said. The industry's capacity was called adequate to meet requirements and materials used by the industry are in ample supply, NPA was told. However, there was agreement with NPA that consideration be given to establishing an expansion goal for cellophane of 425 million pounds annual production by 1956. Industry members attending were: Francis X. Mohan, Modern Containers, Inc.; Roy E. Hanson, Milprint, Inc.; T. J. Norman, Jr., Package Products Co.; Robert L. Lee, Shellmar Products Corp.; Herbert T. Holbrook, Standard Packaging Corp., and Elliot Balestier, Jr., Visking Corp.

unbeatable
delivery
system
Roto's new polyethylene bag maker automatically stacks the bags to facilitate packing operations. Double handling is eliminated; production is speeded; costs are cut!
MODEL PO-2
Latest Development
in Heat Seal Bag Making
● Makes wrinkle-free seals in a wide range of thicknesses ● Handles sheeting or tubing ● Production rates based on film gauge, not bag size ● Exceptionally fast production ● Adaptable to plastics
Roto Bag
MACHINE CORP.
130 East 13th Street
New York 3, N. Y.

PROTECT WITH PARTITIONS

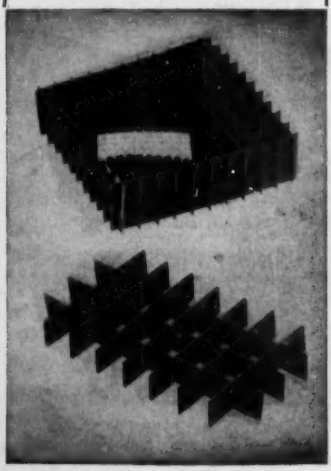
plain - die cut
made to your specification
fast delivery

pharmaceutical
candy • heart box inserts
collapsible tube • toy
and other trades

fast delivery

Let us serve your packaging problems.

RAPID CUTTING CO., INC.
169-173 Franklin Avenue
Brooklyn 5, New York
Phone: ULster 5-1400-01-02



Case-liner specs

Philip O. Deitsch, administrative officer of the Industrial Bag & Cover Assn., has issued an announcement calling defense contractors' attention to the fact that MIL-L-10547A Specification for Waterproof Case Liners has superseded and supplanted the old Specification MIL-L-10547.

Mr. Deitsch points out that it is extremely important for the contractor himself to be familiar with details of this and similar specification changes, because some Government procurement officers in various sections of the country are apparently not aware of the new waterproof case-liner specification, although it became effective Feb. 28, 1952.

Purchasing agents, packaging engineers and shippers are being advised by Mr. Deitsch that, regardless of the wording of Government contracts or bid invitations, items fabricated under the old, superseded specification are no longer in keeping with Government requirements. Even though a product has been made or packed in good faith in accordance with outmoded specifications mentioned in the invitation to bid, ". . . a Government inspector somewhere along the line may reject the whole shipment."

Color identity—

This article continued from page 94)

nents. But above all the stopper is beautiful to sight and touch and has the immense merchandising advantage of visibility for showing the ink colors in the bottle through the stopper. This is a decided new convenience, the company reports, to those who keep a wide range of colors of Higgins inks in desk drawers or boxes where the labels may not be readily seen.

Manufacturers of liquid products such as nose drops, eye drops, etc., which must be dispensed with dropper stoppers will be keenly interested in this new era in stoppering ushered in by Higgins Ink Co. which should have application in other fields.

CREDITS: *One-piece, seamless stopper, Injection Molding Corp., 3823 Independence Ave., Kansas City 1, Mo. Two-piece welded stopper, Lumelite Corp., Pawling, N. Y. Polyethylene and polystyrene, Bakelite Co., Div. of Union Carbide & Carbon Corp., 30 E. 42nd St., New York.*

HELPFUL BOOKLETS FREE!

PACKAGING IN ALUMINUM TUBES. Colorful brochure traces history of aluminum tubes and gives details on advantages, coatings, manufacture, decorations, closures and weights and capacities. Aluminum Co. of America. (J-261)

CELLULOSE FILM. Five informative little leaflets which discuss the fading of printing ink and the use of regenerated cellulose film for the direct wrapping of jellies, sweets and dates, and for the packaging of metal products. British Cellophane Limited. (J-265)

"ALATHON" POLYTHENE RESINS. Booklet explains properties of "Alathon" polythene resin as they pertain to the packaging of foods, pharmaceuticals, cosmetics, chemicals and other products. Lists forms available. E. I. du Pont de Nemours & Co., Inc. (J-276)

VACUUM FEED LABEL MACHINE. Bulletin explains the features and operation of the Mercury "Vacuumatic" heat sealing and labeling machine which feeds, folds and seals label and bag in one automatic operation. Mercury Heat Sealing Equipment Co. (J-279)

"HYDROTONE" INK COLOR SELECTOR. Selector shows 30 different standard ink colors, and dozens of color combinations for printing Kraft, tissue, or other absorbent stocks. Bensing Brothers and Deeney. (J-282)

Any of the booklets described here plus many others—forty-four in all—are available for the asking, without charge or obligation.

Just turn to the Manufacturers' Literature page in this issue (it's printed on heavy coated paper), circle the numbers corresponding to the booklets you want, fill in the reply postcard, and mail. No postage needed.

We'll see that you get the literature you request promptly.

A Service Of

MODERN PACKAGING

A Breskin Publication

575 Madison Ave., New York 22, N.Y.

Better Package... Lower Cost with a **BARTELT** Packager

MAKES POUCH BAG AUTOMATICALLY FROM ROLL OF HEAT SEALING PAPER—FILM—OR FOIL

Here is fast, automatic packaging at low cost . . . resulting in a sturdy, attractive, convenient package that will boost sales, and cut waste.

The base machine makes a pouch-style bag, opens it for filling, seals it, and discharges a complete package. Design allows for selection of the filling equipment best adapted to your product.

Whether you are packaging liquid, powder, solids, or multiple items, the Bartelt Machine will handle your needs. Below are shown the packages of a few of the many nationally known manufacturers who use Bartelt.

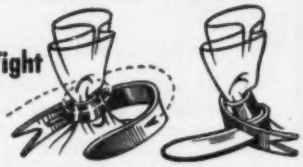
WRITE FOR INFORMATION TODAY...

BARTELT ENGINEERING COMPANY
1904 Harrison Avenue, Rockford, Illinois

Important message to all makers of pliable containers

"Zip-Tite Tie"

Finest Instant Air-Tight Closure



Food-Maker gives national endorsement in premium test

Tested in six major markets—improved six times before being put on the market—these ties have *no equal*. Advertised in newspaper premium offer by one of America's largest food companies (name on request), "ZIP-TITE TIES" scored instant consumer success. Unprecedented demand for use with refrigerator—freezer—clothes—and—utility bags. Orders accepted for 1,000 or 1,000,000 and more. Imprints at lowest cost.

Write for One Dozen Free Samples and Price List

"ZIP-TITE TIES" sold through jobbers across nation. Write for free samples, price list and name of jobber nearest you.

VISIBLE PACKAGE SALES CORP.
540 North Lake Shore Drive **Chicago 11, Illinois**

---

2 SIDES... TO EVERY STORY!
2 SIDES... TO EVERY LABEL!

But with a Label... both sides MUST BE RIGHT!

EVER READY is dedicated to the design and production of labels that are "right both times."

ON THE FACE OF IT . . . attractive, well well-styled effective "Tools of Business" that Go Places and Do Things!

BACK OF THE LABEL . . . through specialization . . . special stock, special adhesives, special formats, Heat-Seal, Red-E-Stik (pressure-sensitive), spot gummed, strip gummed, carbonized, cut single or in rolls. Our 50,000 customers tell us we are right!

Sure, we can help you too!

Free! **IDEA BOOK** Please Ask

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Another Packaging Problem Solved by METAL EDGE

A CASE HISTORY:

PROBLEM:
A manufacturer of highest quality piston rings was plagued by breakage and distorted angularity of rings due to shipping damage . . . wanted a box that would deliver rings without any loss of quality characteristics.

THE SOLUTION:
Various box types were studied, test shipments were made and facts were compared. *The Metal Edge* method alone stood the test and was adopted.

THE RESULT:
". . . customer acceptance was immediate . . . Our rings packaged in Metal Edge boxes personify strength, quality and precision workmanship throughout."*

*Staff Analyst & Coordinator

METAL EDGE—the engineered method—has solved diverse packaging problems in more than 100 American industries.

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NATIONAL METAL EDGE BOX CO.

PACKAGING • MATERIALS HANDLING • INVENTORY CONTROL

334 North 12th Street, Philadelphia 7, Penna.

show the goods—
get attention—
increase sales

Consult Zumbiel for new ideas in acetate boxes, or any of the 6 other types shown below.

SET UP
FOLDING
TRANSPARENT
MAILING PHONO
METAL CORNERED
LETTER VUE

Over 75 years of

C.W. ZUMBIEL COMPANY *good packaging ideas*

Norwood 12
Ohio

Batch to Batch Uniformity!

Rula **HEAT SEALING AND LAMINATING ADHESIVES**

water dispersion and solvent formulations

Rubber Latex Co. specializes in developing and preparing adhesives to meet your laminating and heat sealing needs. These adhesives are widely used for sealing and making laminated combinations of

acetate	**polyethylene**
pliofilm	**sulphite paper**
cellophane	**glassine**
saran	**Kraft**
foil	**scrim**

Rigid laboratory control guarantees the trouble-free performance of all Rula Adhesives.

Write for further details

RUBBER LATEX CO. of AMERICA

CLIFTON, NEW JERSEY

WRENN PAPER COMPANY

SELECTS B&S **SHEAR-CUT SLITTER-REWINDER**

The Wrenn Paper Company, widely recognized for its high quality products, was faced with the problem of slitting a hard-to-handle material. Clean, square edges and uniformly wound rolls were of utmost importance.

After considering several machines, the Bagley & Sewall #15 Shear-Cut Slitter-Rewinder was selected.

B & S Slitters and Rewinders are doing outstanding jobs in mills and converting plants all over the country. Their many unique money-saving advantages make them the first choice of the industry. Before you buy, *compare*...and your choice, too, will be B & S Slitting and Rewinding equipment.

For full details write to The Bagley & Sewall Company, Watertown, New York.

Inserts show Shear-Cut Slitter Units

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designers and builders of QUALITY MACHINERY SINCE 1853

WATERTOWN, NEW YORK

Foreign Representative: CASTLE & OVERTON, INC., 630 Fifth Avenue, New York 20, N. Y.

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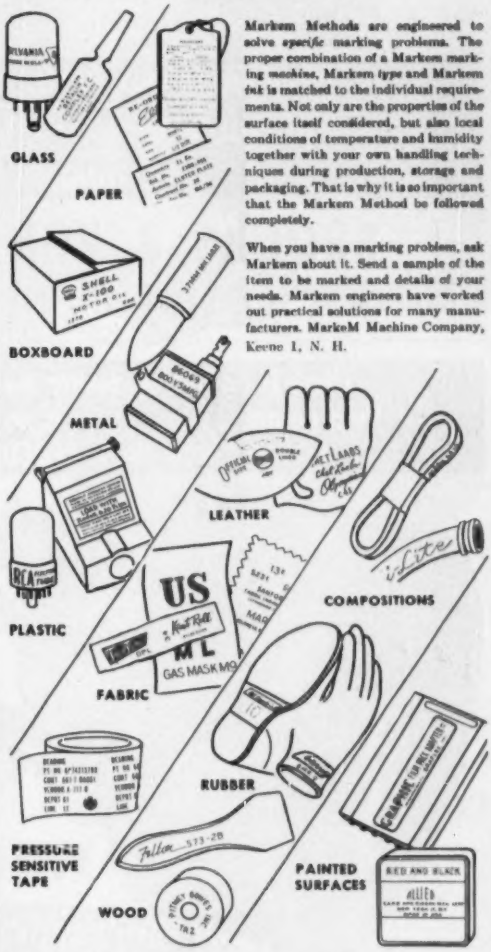
MM METHODS

MARKEM MACHINES
MARKEM TYPE
MARKEM INKS

FOR MARKING PRODUCTS, PARTS, PACKAGES, TAPES, TAGS, LABELS



Markem Methods are engineered to solve *specific* marking problems. The proper combination of a Markem marking *machine*, Markem *type* and Markem *ink* is matched to the individual requirements. Not only are the properties of the surface itself considered, but also local conditions of temperature and humidity together with your own handling techniques during production, storage and packaging. That is why it is so important that the Markem Method be followed completely.

When you have a marking problem, ask Markem about it. Send a sample of the item to be marked and details of your needs. Markem engineers have worked out practical solutions for many manufacturers. MarkeM Machine Company, Keene 1, N. H.

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Your product will sell quicker

from a beautiful, sturdy and economical B. & P. display container.

The unusual laminated finishes that we utilize in our creations are eye-catchers that convert "lookers" into buyers.

DESIGNERS AND MANUFACTURERS
OF FINE FOLDING PAPER BOXES
COUNTER AND WINDOW DISPLAYS

BROOKS & PORTER INC.
304 HUDSON ST., NEW YORK

There is no better closure method than gummed tape. There is no better gummed tape than *REDCORE*

Refold PAPER COMPANY
Branch offices at CHICAGO, ILL. · COLUMBUS, OHIO
PHILADELPHIA, PA. · FT. SMITH, ARK. · ATLANTA, GA.

Moistureproof—

(*This article continued from page 136*)

so good as the cereal-size cases having the same weight board.

The 17-in. cubes of 275-lb. board were re-usable.

Some tape failure occurred, in spite of the fact that the 60-lb. kraft tape was used double.

The apple slices in this shipment were checked for moisture. They had been packed in a variety of containers and had gone through more than usual handling, so it appeared that these conditions should adequately cover conditions met under actual use. The moisture gains are shown in Table III.

TABLE III—MOISTURE GAINS OF APPLE SLICES IN SHIPPING TEST

Description	*Average moisture gain in per cent*	*Range of moisture gain in per cent*
Kraft laminated to sulfite bag fitting the cereal-size case, pouch-type bag with heat-seal closure	0.4	0.2-0.5
Kraft laminated to sulfite bag fitting the 12 x 12 x 34 in. case, heat-seal closure*	1.0	0.8-1.2
Waxed kraft bag used for shipping dried vegetable mix, double top fold closure	2.5	2.4-2.5

* Open top seams were observed in these liners.

These results clearly showed that the kraft-laminated-to-sulfite bags packed in cereal-size cases were adequate water-vapor barriers. These results also showed that the waxed kraft vegetable-mix bags were not adequate barriers.

On the basis of all findings, cereal-size containers of 275-lb.-test board sealed with one thickness of 90-lb. kraft tape and containing kraft-laminated-to-sulfite bags as water-vapor barriers were used for the commercial bulk shipments. Shipment of apple slices between Oakland, Calif., and Chicago became routine.

In three and one-half years, more than four million pounds of dehydrated apple slices have been bulk shipped by General Mills in this manner at a packaging cost of slightly over one cent per pound of slices.

up to 150/m
and
NO CHANGE PARTS

Get a full 8-HOURS of production EVERY DAY!

No downtime for glue preparation, maintenance, and daily clean-up . . .

You pay no more for this sustained performance than for ordinary high-speed labeling machines—*and*, because you use no glue, you totally eliminate frequent stoppage. The CHALLENGER is ALL production time!

The adhesive is right on your label, activated by heat as the label is applied. This is *modern*, carefree, foolproof, *Push-Button* Labeling!

912 ***Be sure to write for details—***

The Label-DRI® CHALLENGER

NEW JERSEY MACHINE Corporation

AUTOMATIC LABELING • PACKAGING — PAPER BOX MACHINERY • MAKERS OF THE PONY LABELRITE

FACTORY SALES AND SERVICE BRANCHES
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1701 CAREW TOWER, CINCINNATI 2, OHIO
2500 W. 6TH ST., LOS ANGELES 5, CAL.

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in PITCHING – or PACKAGING

it's CONTROL that COUNTS!

Yes . . . in both baseball and bags, it's **control that counts.** And from raw flakes to finished product, HOWARD SEAL polyethylene bags are controlled every step of the way; — for uniformity, durability and quality.

Controlled manufacture, controlled conversion, and controlled printing make HOWARD SEAL the "one bag hit" of the packaging league. You're sure to pick a winner when you "seal it and sell it" . . . in a HOWARD bag!

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ASK US TO ANALYZE Your Packaging Problems

Why not get the complete "pitch" on the many advantages offered by HOWARD SEAL packaging, as applied to your product and market? Our laboratory technicians and field representatives are at your service, without cost or obligation. Write or wire today!

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"Pioneers in Polyethylene Packaging"

★ Main Offices: Council Bluffs, Iowa
★ Plants at Council Bluffs, Iowa, and Tucson, Arizona
★ In Canada: Transparent Paper Products Co. 5565 Cote St. Paul Rd., Montreal, Quebec

***Howard Seal Bags are controlled* 8 WAYS!**

1. For quality of raw flake
2. For thickness of extrusion
3. For sealing characteristics
4. For flexibility
5. For elimination of pinholes
6. For specific style and shape
7. For exact size
8. For durability of printing

►HAND JAR AND BOTTLE FILLER

For the manufacturer who needs fast, accurate, spill-proof hand fillings. Flow of liquid or cream controlled by simple, hand-operated valve.

- Pint, quart, half-gallon, gallon sizes (metal stands at extra cost)
- Available in tin, monel metal or stainless steel
- Easy operation
- Moderately priced

Glass containers since 1849

HAGERTY BROS. & CO.

Division of J. Rabinowitz & Sons, Inc.
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THE PEERLESS PROCESS of Roll Leaf Marking *for Decorating and Trademarking*

Increase the salability of your packaged products by decorating and trademarking them with Peerless Roll Leaf in gold, silver, and colors. Mark parts and products for lifetime identification by the Peerless Process. Practical, inexpensive, and attractive engraved and embossed effects produced at printing speeds on Peerless Presses and Attachments. Submit your marking problems to us for free analysis.

FREE . . . To executives who send us an inquiry on their business letterheads we will send a useful sample marked with Peerless Roll Leaf. Ask for Folder MP-7.

PEERLESS ROLL LEAF COMPANY, INC.
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Branch Offices in Boston and Chicago.
Representatives in St. Louis, Los Angeles, San Francisco, Toronto, Montreal, and London, Eng.

Back to general store

(*This article continued from page 90*)
(Operators cannot rely on check-out girls to remember the prices of thousands of items in the store.)

6. To discourage pilfering through the design of packages that cannot be made away with.

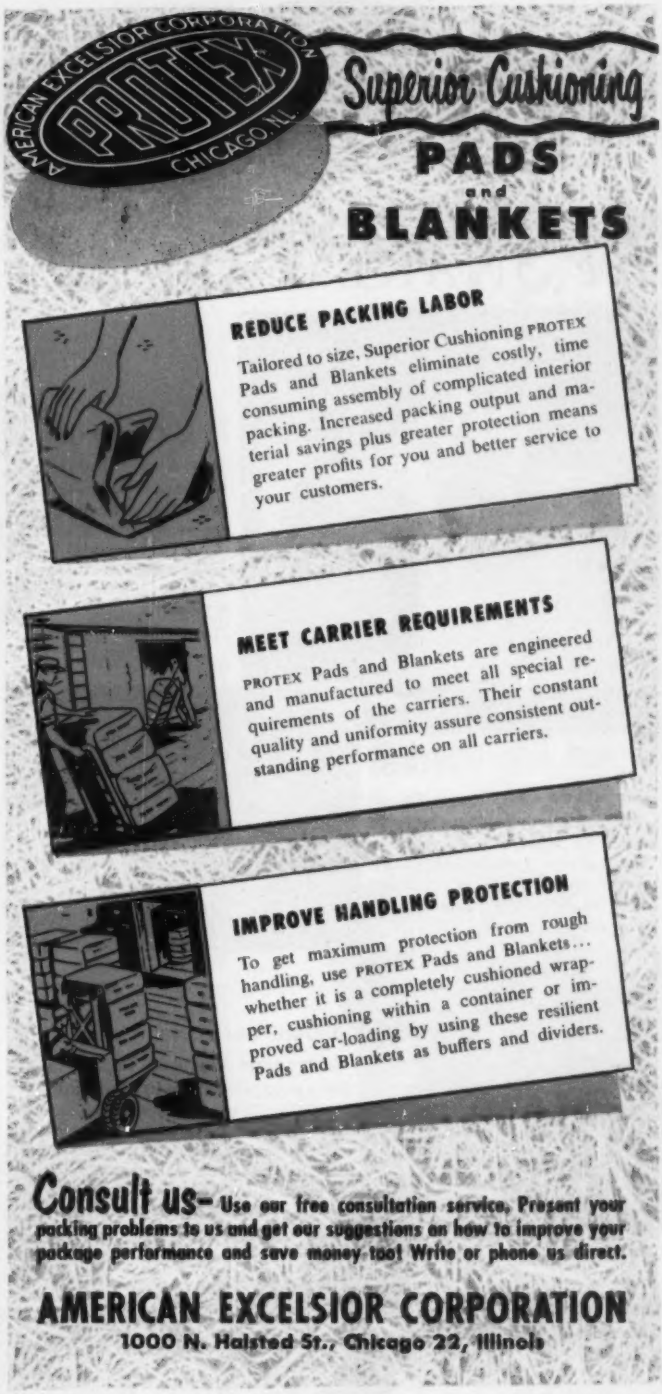
There is also the necessity to supply special display racks for the packaged items if such are required and to be prepared to service the racks. This has led to an entirely new group of distributors catering to the supermarket field known as "rack jobbers." Gradually the newest markets are being built to include soft-goods departments in their over-all layouts, but this is not general in all supers and unless the operators are supplied with adequate facilities for selling an item they are not interested.

Supermarket operators want only items with rapid turnover for good profit. They see such profits in a number of soft-goods items, but they shy away from products where too many style, size and color considerations are involved. Only as such elements can be told to the shopper by the package can such products be conveniently sold in the supers.

Housewares

Housewares are an entirely different story in the supermarket. They take up a considerable amount of space if a complete department is to be provided; thus the packager must not indulge in over-bulky packages. The turnover is not so fast as with groceries, meats and dairy products; thus it has been found necessary to rotate many items to provide new stimulation for the same shoppers coming back to the super day after day—to create new impulse to buy. These items necessarily need attractive packaging that tells what they are for, how they work, how much they cost. They usually require a jobber who understands the business to pick out the quick sellers in the right packages and to see that the racks are properly and continually restocked.

Much attention is being paid to the design of cartons for brooms, mops, scouring pads and the like. It has been found that just good brand identification and product name are not enough. The product name must be immediately recognizable, with recognizability stepped up in a num-


AMERICAN EXCELSIOR CORPORATION
PROTEX
CHICAGO, ILL.
Superior Cushioning
PADS
and
BLANKETS
REDUCE PACKING LABOR
Tailored to size, Superior Cushioning PROTEX Pads and Blankets eliminate costly, time consuming assembly of complicated interior packing. Increased packing output and material savings plus greater protection means greater profits for you and better service to your customers.
MEET CARRIER REQUIREMENTS
PROTEX Pads and Blankets are engineered and manufactured to meet all special requirements of the carriers. Their constant quality and uniformity assure consistent outstanding performance on all carriers.
IMPROVE HANDLING PROTECTION
To get maximum protection from rough handling, use PROTEX Pads and Blankets... whether it is a completely cushioned wrapper, cushioning within a container or improved car-loading by using these resilient Pads and Blankets as buffers and dividers.
Consult us— Use our free consultation service. Present your packing problems to us and get our suggestions on how to improve your package performance and save money too! Write or phone us direct.
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See us at Booth 217—Oct. 14-16 Industrial Packaging & Materials Handling Exposition

Angier

Reinforced

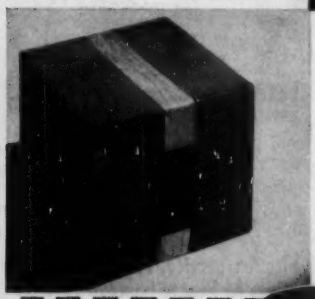
the SNAKE TAPE *way*

Big CARTONS

Now these big cartons are sealed *faster* (only two strips of Snake Tape are used.) They're sealed *stronger* because reinforced Snake Tape has strap-like strength. — *Atlas Collapsible Tube Co.*

Rolls

End pads for Sloane-Blabon linoleum are held securely in place by Angier's waterproof, reinforced tape. Saves damage claims. Easily dispensed by any "cut-off" type machine, Snake Tape is made in 6 widths.



Your CARTONS

Center-seam seal with Snake Tape for a *stronger* closure in one-third the time! The "2-strip" way with reinforced Snake Tape is accepted for parcel post, railway express, air express and truck shipments. Accepted for carload and less than carload rail shipments where rule 5, section 1(c) of Uniform Classification applies.

Send **free** 20 yd. sample and name of Angier distributor

Sign here; attach coupon to your letterhead and mail now.

Angier CORPORATION

Framingham 11, Massachusetts

ber of cases by a product illustration that the shopper cannot miss as she hurriedly passes a shelf.

Another factor influencing the packages for a number of products is the increasing number of men shoppers in supermarkets. Surveys have pointed out that 68% of the husbands shop at least once a week for groceries, often on the big weekly "stock-up." They often buy things the lady of the family didn't intend to buy. They are thus impulse shoppers attracted by appealing package display. The new Elmwood Shopping Center, the glamour market of the Grand Union Co. at East Paterson, N. J., has a "Man's Corner" containing a line of wines, tobaccos, golf balls, work gloves, after-shaving lotions, shaving creams, pipes and other items of appeal to men. Men are also intrigued, if you have watched them shop, by the snack departments which contain the fancy-boxed, cellophane-wrapped and glass-packed specialties.

The fact that children go to shop with their parents not only increases the importance of "kid interest" in packaging, such as the appealing cut-outs on the cereal packages, but calls for packages of small toys which many supers are now stocking.

The supermarket can operate on the smallest profit margin in retailing —about 16%. In non-food items, particularly soft goods, it sees the possibilities of margins of 30 to 40%. The very fact that it is eyeing these fields is an indication that it is feeling a competitive squeeze through its own success and that it must look not only in new directions, but must watch costs even more closely in its food lines.

Supermarket packaging is no longer the exclusive concern of the food industry. Almost any packaged item that can show a rapid turnover and a good profit is now in—or should be in—this type of outlet, posing new packaging considerations deserving close attention of all manufacturers.

ICC approves carboy

The ICC has approved the polyethylene carboy as a package for hydrofluoric acid of not over 60% strength. Also, specification ICC-1F has been issued covering the polyethylene carboy. This will facilitate approval of the polyethylene carboy for other suitable chemicals.

Satisfaction Plus!

. . . Stock Designs and Sizes

WE TAKE GREAT PRIDE IN OUR BEAUTIFULLY LITHOGRAPHED STOCK SUBJECTS WHICH INCLUDE SEASONAL, HOLIDAY OR FLORAL DESIGNS — AVAILABLE IN VARIOUS SIZES.

THESE STOCK CONTAINERS CAN READILY BE USED FOR CANDIES, BAKERY GOODS AND DRY PRODUCTS.

Quality **OLIVE CAN COMPANY** *Service*

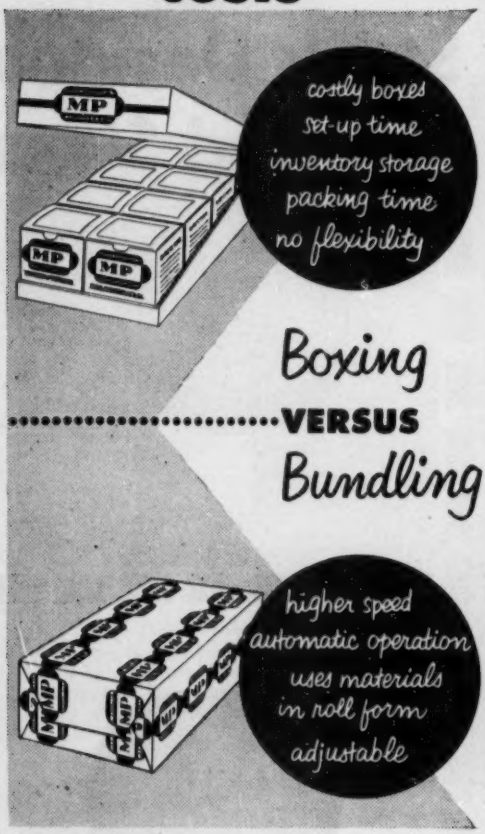
MANUFACTURERS • DESIGNERS

PLAIN • LITHOGRAPHED

METAL CONTAINERS

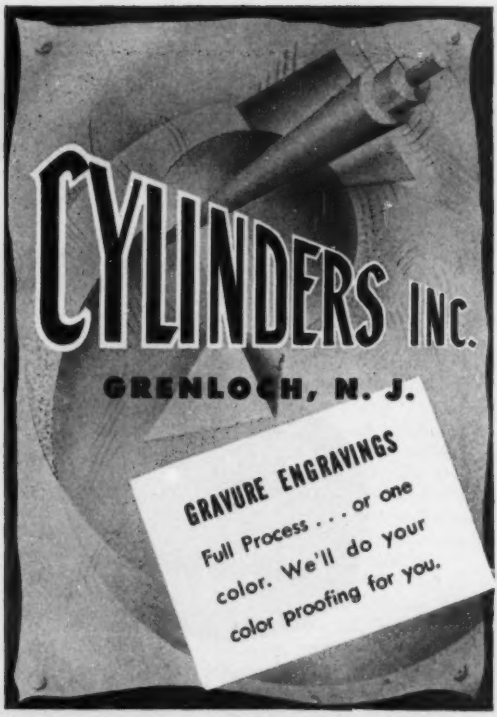
450 N. LEAVITT ST., CHICAGO 12, ILLINOIS

Examine comparative costs



CHANGE-OVERS from boxing in printed display containers to machine bundling have resulted in savings up to 60%. Your costs might be reduced similarly. Can our packaging engineers discuss the dollars and cents of it with you?

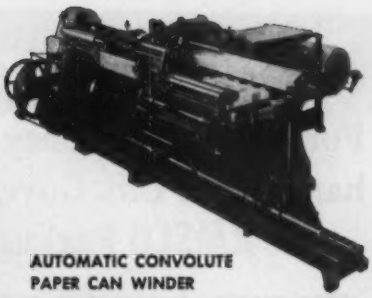
Scandia
MANUFACTURING COMPANY
North Arlington, New Jersey



WE CAN SHOW HOW TO CUT COSTS BY USING

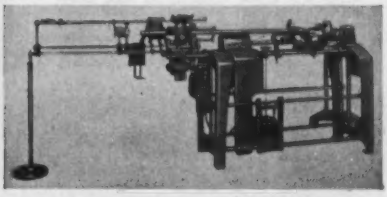
PAPER

WOUND CANS TUBES CORES

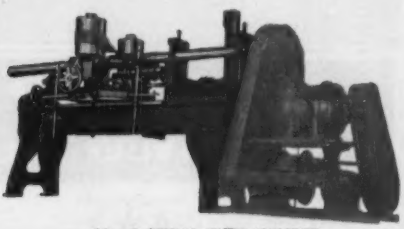


AUTOMATIC CONVOLUTE PAPER CAN WINDER

Winds paper can bodies from 1-¾" to 8" in diameter on the round and from 1-½" to 8" across diagonal corners on irregular shapes such as square, rectangular, oval, triangular, etc.



No. 77 KNOWLTON SPIRAL TUBE WINDER AND CUT-OFF—Winds paper tubes from 2 to 5 ply and from ¼" to 1" in diameter.



No. 4 SPIRAL TUBE WINDER

Winds paper tubes from 2 to 22 plies and from ¾" to 10" in diameter. Can be furnished with cut-offs and glue stands to fit manufacturers' particular needs. Optional machines for cutting tubes in single or multiple lengths, rough or finished cores, or cutting light and heavy side walls up to ½" thickness.

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BROOKLYN 45-53 Beaver St.

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TORONTO, CAN. 260 Richmond St., W.

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For greater efficiency and profitable handling of U.S. Government Contracts use AMSCO Packaging Equipment

Years of experience in the design and manufacture of bag sealing equipment for all type of packaging materials has established Amsco as the foremost producer of this type packaging machinery. During World War II, Amsco, pioneered in the development of dependable, diversified barrier packaging equipment.

Today, companies with U. S. Government contracts requiring Method IA-3, IA-8, IA-9, IIa, IIb or IIc type packaging in flexible moisture-vapor-proof barrier material, use more Amsco equipment than any other make. In addition to equipment for fabricating, handling and sealing barrier materials, Amsco also can supply equipment for packaging in Polyethylene, Cellophane or Pliofilm, as may be specied in U. S. Gov't. contracts.

Visit our booth at the Industrial Packing & Materials Handling Engineers Show in Chicago Oct. 14-16.

Use Packaging Equipment
SPECIALLY DESIGNED
to fabricate, handle and seal barrier materials.

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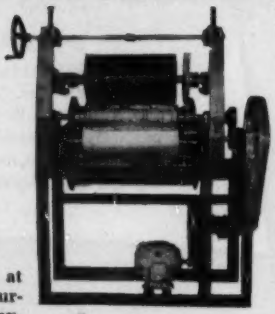
Send for your copy of AMSCO's Book, "Barrier Type Packaging for U. S. Government Orders." Available at no charge. Write Dept. MP-10

LEMBO SURFACE or ROTOGRAVURE PRESS

BEST YET IN A SMALL INEXPENSIVE PACKAGE PRINTING PRESS . . . 6" TO 36"!

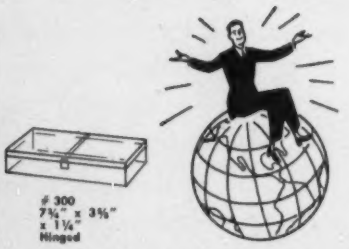


Prints narrow webs at high speed by either surface method or rotogravure. Several units hooked up in series give you a compact multi-color press at amazingly low cost. Excellent for production printing or laboratory work.

Engineered and built by LEMBO . . . manufacturer of fine printing machinery for plastics, paper and textiles, up to 80" wide, 1 to 12 colors, surface and rotogravure.

LEMBO MACHINE WORKS, Inc.
248 East 17th Street Paterson 4, N. J.

Thousands of products are packaged in our



Transparent Plastic Boxes!

"Sit on top of the world" as you improve your packaging with boxes from the WORLD'S LARGEST SOURCE for TRANSPARENT PLASTIC BOXES. 1001 different rigid Polystyrene boxes from 50 molders . . . in stock, **no mold costs**, all sizes, shapes, styles . . . or we will design one to meet your need.

Send us a sample of the product you desire to package. We will recommend the best box without obligation.

#512
10⅝"x6½"x2"
12 compartments

36
2¼" x 1⅞" x 1¼"

Write for illustrated catalog TODAY!

BRADLEY INDUSTRIES
1652 N. Damen Ave., Chicago 47, Ill. Tel: ARmitage 6-6196

Fractional packages

A recent consumer survey revealed that, among women who regularly buy soda crackers in fractional, or inner sealed unit, packages, 93% prefer this type of package because it keeps crackers "fresh and crisp." A majority of the women interviewed in the Du Pont survey said they would like to buy other popular crackers and cookies in a similar package. The women were found to like the fractional packages because they minimize breakage, cut down on waste from soggy, stale cookies, especially in small families and let the housewife keep several varieties on hand.

Du Pont also ran laboratory tests to compare the effectiveness of cellophane with that of another widely used packaging material when used for the inner sealed units of overwrapped cracker packages. A 12-month shelf test showed that superiority of the cellophane inner wrap became apparent after six weeks, although both types of inner wrappers kept the product salable for the full period. Another test, simulating storage by consumers of opened boxes, was said to have demonstrated that cellophane-packaged inner units tasted better and stayed crisp, although the crackers in the other material began to lose crispness after four weeks. The Du Pont Film Department, Wilmington, Del., offers copies of the survey.

Test methods

(This article continued from page 140)

over 0.25 in. in thickness immediately prior to testing.[4]

(c) *Procedure C*—Test specimens shall be conditioned for a period of 96 hrs. in an atmosphere of 90% relative humidity at a temperature of 35 deg. C. (95 deg. F.). The tolerances for this procedure shall be as follows:[5]

Time	±2 hrs.
Temperature	±2 deg. C. (3.6 deg. F.)
Humidity:	
General purposes	±2%
Referee purposes	±1%

(d) *Procedure D*—The specimens shall be conditioned by immersion in distilled water for 24 ±¼ hr. at 23 ±1.1 deg. C. (73.4 ±2 deg. F.).

(e) *Procedure E*—The specimens

[4] Procedure B is commonly used for the purpose of obtaining reproducible test results on the thermosetting materials by means of a short-time conditioning period, or where the specific effects of moderate drying are to be determined.

[5] Procedure C is recommended wherever the specific effects of exposure to severe atmospheric moisture are to be determined.

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WHEN YOU KNOW HOW"
MG and MF TISSUE
WAXING BASE
CUSTOM STOCKS DECORATED
MG & MF MANIFOLD PAPERS
MAKING THIN PAPERS
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Cutlery and band instruments
Food products—and thousands of other products of all kinds.
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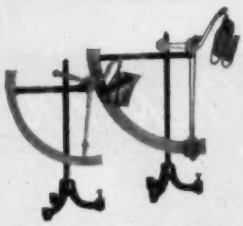
For Packaging

Thickness-Burst Test "CADYTEST" Basis Weight Scales

Materials



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Cady Basis Weight Scales supply ream weight in pounds by weighing one sample sheet. Tissue scale is at left. Paper Scale at right. Boxboard scale not shown. Please write for catalog.

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Designers and manufacturers of equipment for Bag Making, Printing, Coating, Laminating, Gluing and Labeling

shall be conditioned by immersion in distilled water for 48 ±¼ hr. at 50 ±1 deg. C. (122 ±1.8 deg. F.).

Tests at normal temperatures

4. (a) Unless otherwise specified, materials conditioned in the Standard Laboratory Atmosphere shall be tested in the same atmosphere.

(b) Unless otherwise specified, materials conditioned according to Procedure B shall be tested at Standard Room Temperature conditions. Not more than ¼ hr. shall elapse between the time of the removal of the specimens from the desiccator and the start of the tests.

(c) Unless otherwise specified, materials conditioned according to Procedure C shall be tested in the same atmosphere.

(d) Unless otherwise specified, materials conditioned according to Procedures D and E shall be wiped immediately with a damp cloth, then with a dry cloth and tested at Standard Room Temperature. The test shall be started immediately and completed within 2 min.

Tests at other standard test temperatures

5. When tests are desired at standard test temperatures other than prescribed in Section 2 (c), materials shall be transferred to the test conditions within ½ hr., preferably immediately, after completion of the preconditioning (according to Procedure A or B). The specimens shall be held at the test temperature for no more than 5 hrs. prior to test and in no case for less than the time required to insure thermal equilibrium.

Selection of conditioning procedure

6. (a) In the case of materials covered by ASTM specifications, reference should be made thereto to determine the conditioning procedures to be used.

(b) In the case of all other materials, the choice between procedures should preferably be based on the one that gives the most reproducible test results.

Report

7. The report shall state the conditioning procedure used and also the relative humidity and temperature of the atmosphere in which the tests were made.

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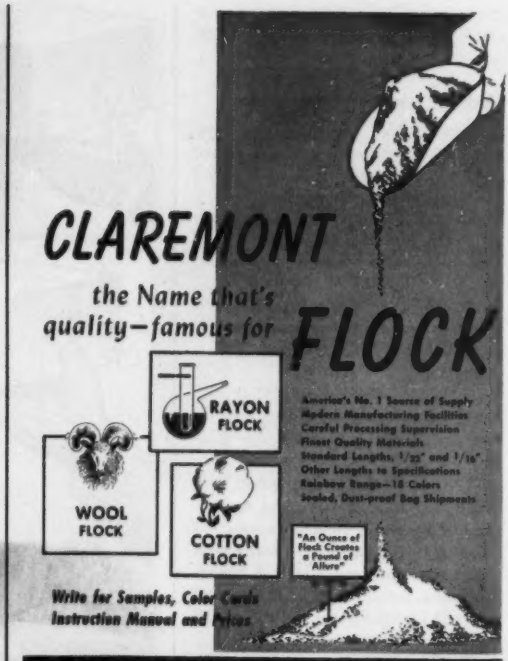

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FOR SALE: New complete multi-wall sack plant valve and open mouth sacks. Comprising tuber, automatic sewing table (both ends), other sewing machines. Prompt delivery after dismantling. Inspection when running. Payment in sterling. Dealer's inquiries invited. Box 410, Modern Packaging.

4-COLOR GRAVURE WEB PRESS: Has sheeting attachment and pile delivery. Sheeter is adjustable to sheet according to size of cylinder from a minimum of 27" to maximum of 30". Maximum printing size 21"x30", cylinder sizes 23" wide x 30" circumference. Electrically driven 5 H.P. motor with Reeves drive. The press has been used principally for proofing. Press speed 2,000 to 2,500 sheets per hour. Could readily be converted to print at much faster speeds. The press is equipped with 4 extra impression rollers, heat controlled drying units, also cold air drying units, and 4 Ionition static neutralizers. Has 52 cylinders in addition to 4 extra shafts for white rolls. Requires floor space 6'3" x30'8". Price $35,000. In operating condition on our floor. Inspection by appointment. Box 414, Modern Packaging.

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HELP WANTED

WANTED: Man with experience on laminating machine to work out new products and get sales for such equipment, preferably on thicknesses from 15 to 125 point inclusive. Box 412, Modern Packaging.

REPRESENTATIVE WANTED: Pioneer cellophane converter offers splendid opportunity to high type individual to sell printed and converted cellophane and other flexible packaging materials. Territories open. Commission basis. Write details as to age, experience, and territory covered. Box 413, Modern Packaging.

PRODUCT ENGINEER: To locate in the South. Permanent position in the production, development, and design of packaging machinery for man with at least five years related engineering experience. Long established Southern concern with international sales. Send full details to: Wright Machinery Company, Subsidiary of The Sperry Corporation, Dept. 100, P. O. Box 2211, Durham, N. C.

FOLDING CARTON SALESMAN: Experienced. Wanted for St. Louis-Kansas City territory. Salaried. Consolidated Paper Co., Monroe, Michigan.

WANTED: Aggressive young man, age 24-35, with folding carton background, preferably with an integrated operation, for sales service position in home office located in the Middle West, leading up to sales or sales management. Some factory experience preferable, but not necessary. Our own personnel know of this advertisement. Box 415, Modern Packaging.

AGENTS WANTED: We are a leading manufacturer of custom-made and hand-made bags, caseliners, covers and shrouds. They are made of various grades of waterproof, greaseproof, moisture-vaporproof, rust preventive, waxed, creped and plain papers for shipping and storage protection. They are used by scores of industries and in defense packaging. We have openings for sales agents in several parts of the country. We prefer men now selling allied lines or defense packaging materials to industry and paper merchants. If interested and if you can handle another line, please advise lines carried, companies represented and territory covered. Box 419, Modern Packaging.

SALES REPRESENTATIVES: One of America's leading manufacturers of foil labels, foil pressure sensitive displays, foil diecut and embossed specialties and novelties. We are seeking top men on commission basis, now carrying one or two allied lines. Unusually fine opportunity with profitable future. Furnish full particulars of experience and territories now covering. All replies held in strictest confidence. Box 431, Modern Packaging.

WANTED: We have need of a young man experienced in designing and making folding carton samples from all grades of folding box board including Clay Coated. Consolidated Paper Co., Monroe, Michigan.

SITUATIONS WANTED

WANTED: Young family man, Energetic, resourceful, adaptable, desires position of responsibility and opportunity in sales or operations with progressive firm. Experienced in plant management, purchasing, protective packaging. Trained in industrial corrugated sales. Thoroughly familiar with military preservation and packaging. Currently managing packaging plant employing 350 persons, has effected 133% production increase. University of Michigan graduate. Best references. Box 416, Modern Packaging.

FOLDING CARTON AND DISPLAY DESIGNER: Samplemaker thorough knowledge carton construction, glue-machines packaging machinery, block and jig-saw dies, carton development and production technique. Presently employed in production department of large printing and folding box company. 27 years old, family, veteran, graduate of N. Y. Employing Printers Assoc. Box 411, Modern Packaging.

WANTED: Man age 42, with years of experience in various types of packaging films, automatic packaging equipment and plant layout, open for position with reliable company. Has complete knowledge of fresh fruit and vegetable processing, production and packaging. Box 418, Modern Packaging.

MISCELLANEOUS

WANTED: Plastic Scrap—Cellulose Acetate and rigid vinyl sheet scrap in any quantity. Also Polystyrene, Acetate, Butyrate molded rejects, scrap and excess molding powder inventories. Box 408, Modern Packaging.

LINES WANTED: By Mid-Atlantic sales organization, headquarters Baltimore, Md. Lines of fine or coarse paper or converted paper products on commission basis direct to users. Box 417, Modern Packaging.

WANTED: Cameron Slitter, Packaging Line, Labeler, Capper, and Mixer. Box 407, Modern Packaging.

CUSTOM PACKAGING SERVICE: Time available now on Bartelt automatic machine. Pouch style bag automatically made, filled, sealed! Liquids, powders, solids, multiple items. Complete, accurate, ultra-clean service guaranteed. Box 409, Modern Packaging.

WANTED: Plastic scrap and rejects in any form. Cellulose Acetate, Butyrate, Polystyrene, Vinyl Polyethylene, etc. We pay top prices for clear, colored and printed scrap in any quantity. Box 406, Modern Packaging.

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For further information address Classified Advertising department, Modern Packaging, 575 Madison Ave., N. Y. 22, N. Y.

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Modern packaging

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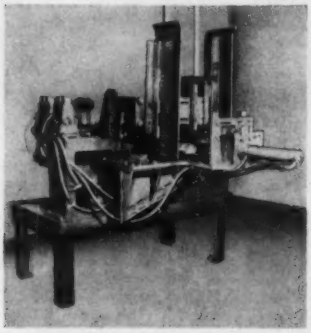

This illustration shows a machine built specially for the American Brake Shoe Company, which simultaneously prints on the outside and inside of brake shoe linings at a speed of 60 per minute, and which is adjustable to various sizes of linings.

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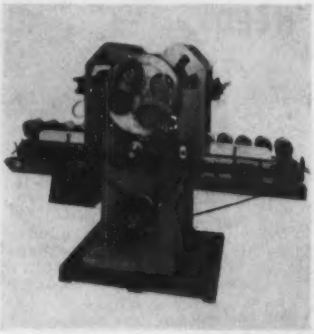

This machine illustrates our new Koloprint machine built to the order of Sears Roebuck Company of Chicago with seam registering device.

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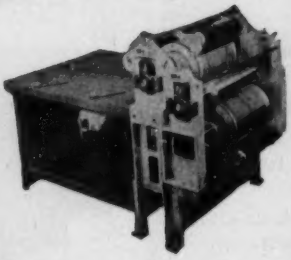

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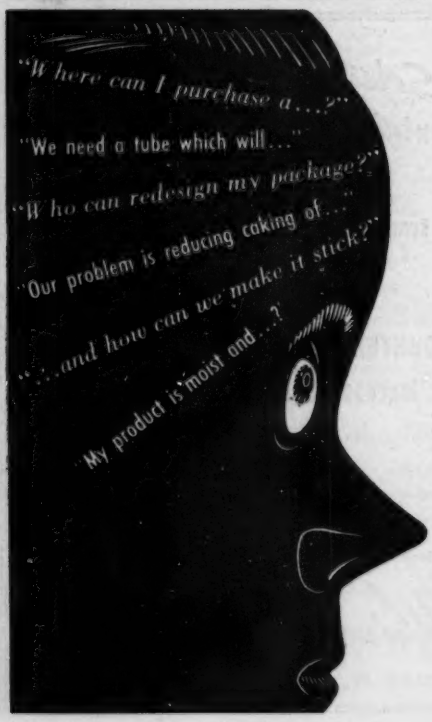
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